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Drug & Cosmetic INDUSTRY

February 1946

What's in confection BESIDES Good tast

It takes more than sugar and spice to make confections nice, as any forward-looking candy manufacturer can tell you. That's why good confectioners everywhere make it a point to specify Snow Top Precipitated Calcium Carbonate U. S. P.—first because it's a perfect ingredient and second because it's the ideal dusting medium.

Yes, Snow Top Precipitated Calcium Carbonate U. S. P. has many uses in many industries. And that list grows daily with the constant development of new uses.

More and more drug and cosmetic manufacturers are joining the ranks of satisfied Snow Top users because they have found it makes such an excellent base for their products. In the manufacture of face, body and foot powders, Snow Top is top choice because it bulks high, has the right opacity, is extremely fine and adheres to the skin. Snow Top is the accepted standard among leading dentifrice manufacturers because it does the work safely and effectively.

Snow Top Precipitated Calcium Carbonate U. S. P. is pure and always uniform in color and dependability. Its use in antacid tablets and other edible food products is widespread because it meets Pure Food & Drug Act and U. S. P. requirements. Snow Top is available in the following five grades to provide a wide selection to meet your specifications. Write for your sample today.

SPECIFICATION RANGES FOR SNOW TOP

Grades According to Density	Rattle cc.	Flow* cc.	2-Hour cc.	Final** cc.	g/cc.	Drop Density*** lbs./ft.
Super Light	30-38	40-48	70-90	55-65	.400-0.300	25.0-18.7
Light	20-30	27-40	45-70	40-55	.550-0.475	34.3-29.6
Medium	17-23	19-27	25-45	24-40	.675-0.550	42.1-34.3
Heavy	15-17	15-19	20-25	19-24	.800-0.675	49.9-42.1
Extra Heavy	11-15	11-15	15-20	15-19	.950-0.800	59.3-49.6

*Measure of the absorption ratio **Measure of wet bulk ***Measure of dry bulk packing density

Snow Top Precipitated Calcium Carbonate ★ Abietic Acid ★ Nuchar Activated Carbons ★ Liquid Caustic Soda ★ Chlorine ★ Indulin (Lignin) ★ Liqro Crude Tall Oil ★ Indusoil Distilled Tall Oil ★ Tall Oil Pitch ★ Sulphate Wood Turpentine

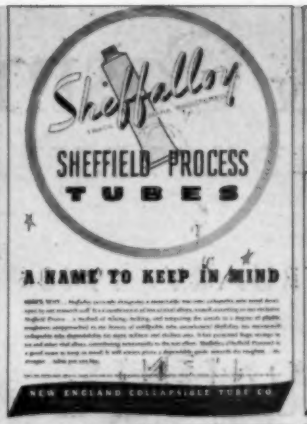
SNOW TOP

INDUSTRIAL CHEMICAL SALES

DIVISION WEST VIRGINIA PULP AND PAPER COMPANY

230 PARK AVENUE, NEW YORK 17, N.Y.
35 E. WACKER DRIVE, CHICAGO 1, ILLINOIS
748 PUBLIC LEDGER BLDG., PHILADELPHIA 6, PA.
844 LEADER BLDG., CLEVELAND 14, OHIO

WHEN TUBE METAL IS UNDULY EXPOSED TO CORROSION
SPECIFY Vinicote
Sheffield Process TUBES
SHEFFIELD PROCESS TUBES
NEW ENGLAND COLLAPSIBLE TUBE CO.



THEY ALL ADD UP TO ONE SUGGESTION..

"Specify Sheffalloy"

TRADE MARK REGISTERED

Sheffalloy
TRADE MARK REGISTERED
SHEFFIELD PROCESS
TUBES

The reproductions of a recent ad series, illustrated here, show a number of tangible reasons for specifying *"Sheffalloy" Sheffield Process Tubes* and VINICOTE inner coatings. Among the *in*tangibles is the fact that the first toothpaste ever packed in collapsible containers used a *Sheffield Process Tube!* The 96 years of experience we have acquired since then assure you of unparallelled "know-how" in collapsible tube manufacture. If your product can be packed in collapsible tubes, specify tougher *SHEFFALLOY*. Call or write our nearest office for every possible cooperation.

NEW ENGLAND COLLAPSIBLE TUBE CO.

3132 S. CANAL STREET, CHICAGO 16 • NEW LONDON, CONN. • W. K. SHEFFIELD, V. P., 500 FIFTH AVENUE, NEW YORK 18

THE WILCO COMPANY, 6800 McKINLEY AVE., LOS ANGELES 1

Drug & Cosmetic INDUSTRY

FEBRUARY 1946

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THOMAS R. FARRELL, Editor

ELMER SHEETS, Managing Editor

FRANCIS CHILSON, Production Consultant

M. A. LESSER, Technical Editor

HARRY G. KELBLY, Raw Material Editor

HILDA C. McCOLLOM, Art Director

Oooooh!

"buy me one of those"

Childlike, she wants everything that appeals to the eye. But, she's not much different than her adult mother. For, modern psychology has proven that sales are built on eye-attraction. Color and design go a long way toward writing out a sales slip.

Warnercraft has developed packaging until it has become a fine science with them. They combine their knowledge of people, products and material to produce a box that will instantly attract the eye . . . that will do the utmost in a selling job.

WARNERCRAFT

"THE FINEST WORD IN PACKAGING"

Makers of set-up and folding boxes of all types, transparent acetate containers, hand made specialties, counter displays and dispensers.

THE WARNER BROTHERS COMPANY

Main Office and Factory: 325 Lafayette Street, Bridgeport, Conn.
New York Sales Office: 200 Madison Avenue, New York, N. Y.

OUI, MONSIEUR

Nous fabriquons dans nos deux usines modernes des cosmétiques de qualité superieure sous toutes leur formes, en vrac et empaquetés.

QUALITY Z INTEGRITY SERVICE

Nous sommes actuellement à meme d'exécuter vos commandes, ou de fabriquer, selon vos formules, des cremes, poudres, lotions, rouges pour les lèvres, fards pour les joues, maquillage pour les yeux, extraits, eaux de Cologne, etc.

P. S. Notre nouveau rouge "émollient" pour les lèvres mérite que vous vous renseignez à son sujet.

YES, SIR

Our two factories with fine modern equipment, are producing cosmetics of superior quality in every classification, in bulk and packaged.

QUALITY Z INTEGRITY SERVICE

We can now handle your order or manufacture to your specifications creams, powders, lotions, lipsticks, rouge, eye preparations, perfume, cologne and other specialties.

Our new emollient lipstick is well worth an investigation.

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[Two Plants]

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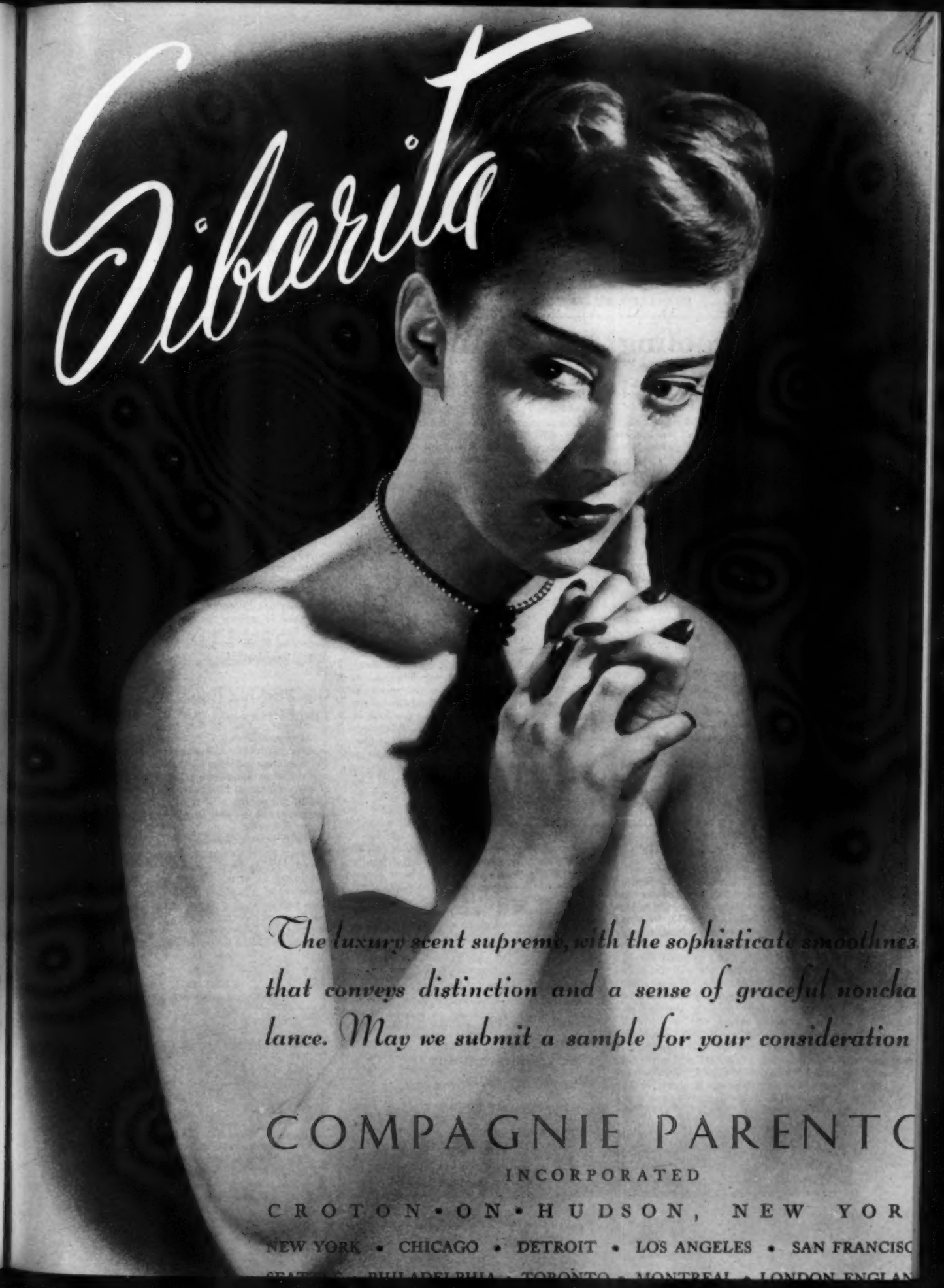
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that conveys distinction and a sense of graceful noncha
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INSIDE NEWS

FEBRUARY PREPARED BY NATIONAL CAN CORPORATION, NEW YORK, N. Y. 1946

Mildewproofing Agent Finds Use As "Athlete's Foot" Remedy

After being extensively used by the armed forces successfully as a mildewproofing agent for fabrics and other materials, a chemical known as a compound G-4, has been found to be effective against fungi which cause "athlete's foot".

Athlete's foot is the most frequently observed fungus infestation attacking the human being. It has been shown that practically the entire adult population carries the spores of the fungi on its feet. People who are susceptible readily develop the manifestation of the fungus infection.

Although the conditions are usually mild in character, they may be severe enough to incapacitate the patients. Re-infection, especially from shoes and stockings harboring the fungi, is a great problem, and prophylactic measures are as important as the therapy.

The chemical compound, bis-(5-chloro-2-hydroxyphenyl) methane, produced by a chemical concern in New Jersey, is strongly fungistatic and fungicidal against pathogenic fungi, especially those of the Trichophyton group which cause dermatophytosis of the foot, commonly called "athlete's foot".

The fact that compound G-4 is practically non-toxic, non-irritating, and highly effective against the disease-producing fungi, makes it particularly suitable.

Compound G-4 can be incorporated into many different types of bases. One that is particularly effective is a talcum powder, containing two per cent of the compound. Applied regularly as a dusting powder to the feet, as well as in the shoes and stockings, it reduces the incidence of this widespread disease.

An athlete's foot powder, containing compound G-4 as the active ingredient, can be packaged in a tin container to permit a liberal sprinkling without waste.

Products of this type are best packaged in tin cans for better protection against wetness, dampness, air and to prevent breaking.

With tin cans, there is no worry about tearing, chipping or shattering should the container fall from the medicine chest. They can not become soggy. Besides, cans are neat-looking, light, compact, and lend themselves to attractive lithograph labeling.

Cans may be had in slip cover, screw, or perforated top designs, and the body of the container may be square, oblong, round or oval in shape, according to package design.

For help in packaging, National Can Corporation's staff of experts will be glad to go over your problems with you. Write to your nearest National Can office or National Can Corporation, 110 East 42nd Street, New York 17, N. Y. 1194

Shortening or Drying Oils

Two ways to make linseed oil more useful have been disclosed lately. Polymerization under appropriate conditions will convert the linolenic acid into a high polymer form that is insoluble in acetone. Since the portions which have a suitable composition for use in shortening are soluble in this reagent, separation is simple. Sixty to sixty-five per cent of the polymerized oil will be found in the shortening fraction. When hydrogenated, there is no tendency to revert.

The linolenic high polymer fraction provides an excellent drying oil.

Soybean oil, as well as linseed, can be improved by neutral catalytic conjugation or isomerization, by a method reported from one of the government laboratories. Quicker setting and drying in paints is obtained. The conjugated oil films are more resistant to hot and cold water and to alkali. 1195

Easier Grinding

Spice seeds, having a high oil content, are very difficult to grind to a fine powder. Yet they must be ground to be used.

Accordingly, there is a very practical interest in a process that avoids the difficulty without altering the aromatic oils or losing the volatile constituents. An ordinary oil expeller, such as is used for cottonseeed oil, can be used to take the oil out of the seeds. The cake, with a small amount of residual oil, is readily ground. The expelled oil can then be returned to the powder by spraying while stirring.

When there are undesirable materials in the oil, such as those that cause rapid development of an off flavor, a chemical treatment may be carried out to remove them before returning the oil to the carrier. 1196

Electronic Vegetable Blanching

Electronics have found a place in food processing. Food technologists have developed a method for blanching vegetables, which is superior in vitamin content over the customary steam or boiling water method. The equipment, employing high frequency electricity, has already wide commercial use from producing artificial fevers in the human body quickly to reducing glue-setting time in plywood manufacture.

Enzymes, which cause the off-flavors and vitamin losses of processed vegetables, are inactivated by heat. Present methods require vegetables to be heated longer than is necessary, in order that the center temperature reaches the point where the enzymes are inactivated. Electronic blanching reduces the time element with a correspondingly better processed product. 1197

New Insect-Controlling Methods

New methods are being revealed for controlling insects. One of the latest is spreading the insecticide on the soil. This in turn is absorbed by the plant. As the insects feed on the plant, containing the poisonous sap residue, they are killed. At present this method has been successful on commercial flowers only, but this new method should bring an answer to some of our most difficult pest-control problems. 1198

Gas Packing Boon to Food Processing

Many products such as coffee, candy, nuts, dried and dehydrated products lose flavor and freshness in the presence of oxygen. The amount of oxidation depends on the amount of oxygen present and takes place more rapidly in the presence of light. The light-tight vacuum can is the now widely-known solution to this difficulty.

A new process known as "gas-packing"—in which air is drawn from the can and replaced with an inert gas, harmless, odorless and tasteless, is now being used for many products to supplement vacuum packing. With gas packing it is possible to achieve a still lower percentage of oxygen. Also, it can be used for large-size cans where vacuum packing would be more difficult. 1199

NATIONAL CAN

PLANTS: NEW YORK • BOSTON • BALTIMORE • CHICAGO • HAMILTON, OHIO • FORT WAYNE, INDIANA

Canned Orange Juice to Taste Like Fresh

Constant research and experimentation with the canning of orange juice is reaping rewards and it won't be long before housewives can have the full taste values of the fresh fruit along with the time-saving and storage convenience of the tin can. Quicker processing and immediate cooling of the canned juice is the major step in preserving fresh flavor, and storage at low temperatures is a further aid. 1201

Tin Can Captures New Fish

The lowly carp, long snubbed by fish fanciers, has come into its own, thanks to the tin can. A war-born industry, carp canning is here to stay, for the canning process debones and deodorizes the fish and gives it the firmness of salmon or tuna. 1202

Still More Safety for Tin Cans

A vacuum testing machine to detect leaks in hermetically sealed cans is another war-born device that has peacetime value. The machine was used to detect leaks in the metal cans in which cartridges were packed. Cans pass on a conveyor belt through a vacuum chamber. If a can is imperfect, the viewing inspector will see air bubbles discharged. Its use to test hermetically sealed cans for all types of products is augured, and represents still another way of pre-checking the perfection of the can. 1203

Increased Bactericidal Action

Numerous skin disorders which can be treated by the use of salves, lotions, ointments and the like are said to be more efficiently controlled and corrected by the use of medicinal preparations which are regulated as to their hydrogen-ion concentration. It is suggested that lotions be as near as possible to pH 5.4. 1204

Canned Rye Bread

A new kind of bread that is literally the "staff of life" to people allergic to wheat is an unusual recent invention.

A 100% rye bread was prescribed for a patient who was allergic to milk, eggs and all cereal except rye. Since there was no 100% rye bread on the market, the patient's husband did some experimenting and came forth with a loaf that tastes, looks and cuts like bread and is made only of rye flour, vegetable oil shortening and yeast. Now, the husband is in the bread business, and thanks to the sturdy light-proof, air-proof tin can, his "prescription" oven-fresh bread is reaching the people who need it wherever they may be. 1205

Technical Topics

NEW ANTACID — A new compound has been discovered which has the capacity to buffer and neutralize hydrochloric acid. The basic aluminum salt of aminoacetic acid is reported 42 per cent more effective in acid consuming power than dried aluminum hydroxide gel previously used. Extensive clinical investigations with the compound are now in progress under the supervision of prominent scientists. 1206

NEW VEGETABLE WAX FOR SOAP — A Brazilian vegetable wax is reported to have successfully replaced oleaginous products of the Far East in many soap products. 1207

HEAT ACTIVATION — Subtlethal heating of the spores of many thermotolerant aerobes is reported to have a determining influence on the number of spores which will germinate. 1208

NEW CELLULOSE HEMOSTATIC—Cellulose is coming into new use in medicine. A soluble cellulose, prepared by oxidating with nitrogen dioxide, is used as a hemostatic in internal, as well as external, bleeding. Methylcellulose is advanced as a satisfactory substitute for glycerin-gelatin in medicinal pastes and for natural gums as an emulsifying agent. 1209

GLUE PEELS PAINT—A strong solution of glue is suggested as an agent for the removal of blackout paint from windows and other glass surfaces, especially lamps. The painted surface is coated with the glue solution, which, when it has completely dried, peels the paint from the glass. 1210

PIPERINE AND PYRETHRIN INSECTICIDES — Compositions containing admixtures of varying proportions of piperine and pyrethrins are said to be unusually effective as insecticides. 1211

ALUMINUM CLEANER — Compositions for cleaning aluminum consist of an alkali metaphosphate or monobasic ammonium phosphate and a small proportion of an alkali fluoride with, optionally, a wetting agent and sulphamic or tartaric acid. 1212

NEW EMULSIFYING PRODUCT — A new emulsifying agent, which may be especially useful in the preparation of flavoring for use in cooking has been patented recently. The product consists of a combination of pectin and an "-onium" or amine salt. 1213

TREATMENT FOR SULFA TOXICITY—A patent has been issued recently for a chemical compound which will prove valuable in treating toxic effects of sulfathiazole, aspirin and thiouragil. 1214

INSOLUBLE SOAP USEFUL AS LUBRICANT—A mixture of three kinds of soaps which most people would never recognize as soaps is the basis for a recent patent. This soap—calcium stearate—is reported to be a valuable lubricant. 1215

NEW PHENOLIC GLUE — A new powdered resin glue has been announced recently. A hot-press phenolic glue, it is extensible with wheat flour and has been given strict performance tests in plywood and furniture panel stock. 1216

ELECTRO-BRIGHTENING OF ALUMINUM-SILICON ALLOYS — The value of glycerine in electropolishing and brightening of metals has been extended to aluminum-silicon alloys, according to a recent patent. 1217

NICOTINIC ACID CURE — A patent has been issued for a more simplified method of manufacturing nicotinic acid, cure for pellagra, from the decarboxylation of quinolinic acid. 1218

NEW WAX—It is announced that a new wax similar to Carnauba has been gathered from Calathea Sutrea, a broad leaf perennial in Brazil and Central America in experimental quantities and is being tested by the U. S. Department of Agriculture. 1219

ALCOHOL AND GLUCOSE FROM POTATOES—Butyl alcohol and glucose are two chemical products now made in quantities from surplus potatoes. 1220

Every effort will be made to furnish additional information on these articles. Where such information is not obtainable, we will refer inquiries to the original source of the article. Write to National Can Corporation, 110 East 42nd Street, New York 17, N. Y. Please mention the number at end of article — also name of the magazine you saw it in.

NATIONAL CAN CORPORATION

Manufacturers of

SANITARY PACKERS CANS • PLAIN AND LITHOGRAPHED CANS FOR FOODS, DRUGS, OILS, PAINTS, VARNISHES • STEEL DRUMS AND PAILS

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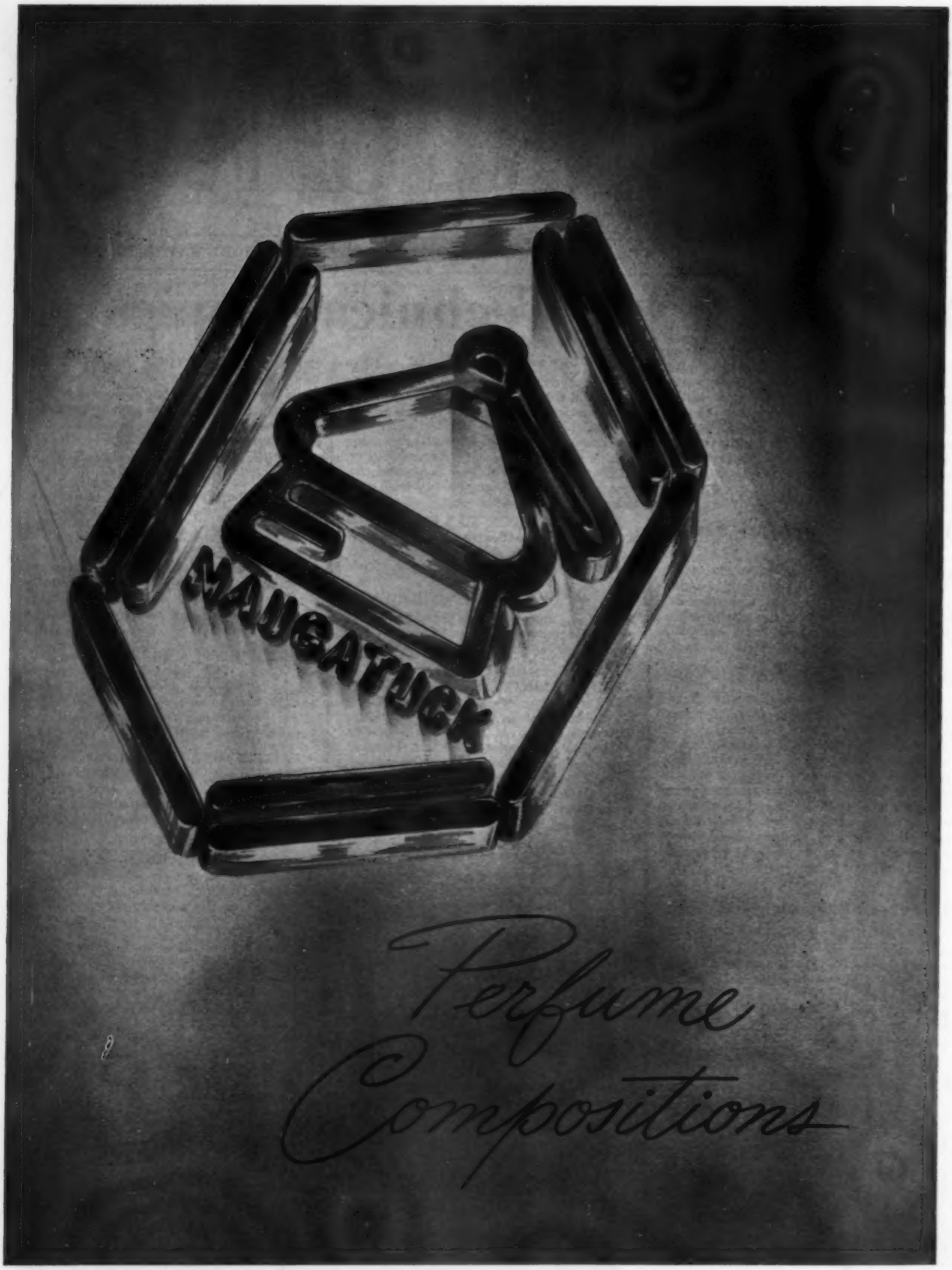

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Sole Representatives for: BRUNO COURT, S. A., GRASSE, FRANCE C. A. P. P., CASABLANCA, MOROCCO
LABORATOIRES LOUIS BORNAND, PARIS, FRANCE

For Chlorination, Sulfonation, and other organic syntheses, use these Hooker Sulfur Products...

Hooker sulfur products are valuable to chemists because they are all extremely reactive and capable of being utilized in many different reactions. For example, the sulfides are extensively used in the preparation of organic sulfides, mercaptans, thioglycols and thio acids. All of the sulfur-chlorine compounds are important as chlorinating agents. Sulfuryl chloride, in addition, has great potentialities in organic synthesis for sulfonation, and as an acylating and condensing agent. The high quality of these Hooker chemicals, their freedom from impurities which might vitiate these reactions, are important reasons for choosing Hooker sulfur products.

Technical data sheets describing more fully the properties of these products are available. If you are particularly interested in the reactions of Sulfuryl Chloride or other specific chlorinating agents, you may also want copies of the following bulletins:

Bulletin No. 330—Sulfuryl Chloride in Organic Chemistry.

Bulletin No. 328A—Hooker Chlorinating Agents.

HOOKER RESEARCH *Presents*

DIMETHYL CYCLOHEXANE

$C_6H_{10}(CH_3)_2$

A new hydrogenation product of Hooker Research is offered for your consideration. An examination of its physical properties may suggest interesting applications. Dimethyl Cyclohexane is a hydrogenated xylene, but in its chemical behavior it resembles the aliphatic hydrocarbons more than the aromatic. It can be oxidized or reacted with halogens to yield products of potential value in organic synthesis.

Briefly, Dimethyl Cyclohexane is a water white liquid of mild odor. It consists of a mixture of meta-, para-, and ortho- isomers. Its freezing point is below -65°C, its boiling point is 120°C, its specific gravity at 15.5°/15.5°C is 0.776. Its water solubility is extremely low and it is completely miscible with most common solvents.

Technical Data Sheet No. 360 describing the chemical more completely, and experimental samples are available when requested on your business letterhead.

PRODUCT *Chemical Formula* *Molecular Weight*	DESCRIPTION & USES
Sodium Sulfhydrate NaSH; 56.1	A light lemon colored solid in flake form. Melting point 55°C Min. Manufacture of thiosulfate, thio urea for sulfa drugs, thiosalicylic acid, thio and dithio benzoic acids, sodium thio sulfate; preparation of dyestuffs and other organic chemicals; catalyze formation of thioamides; unhairing hides; desulfurizing viscose rayon and in ore flotation agents.
Sodium Sulfide Na_2S; 78.1	A light salmon colored solid in flake form. Melting point 100°C Min. Manufacture of dyestuffs, intermediates, organic sulfides, insecticides, paper pulp, special glass, soap and rubber; as an ingredient of dye liquor; engraving, lithography, and printing; ore flotation and refining metals, dissolving cresol from coal tar oils; unhairing hides; desulfurizing viscose rayon.
Sodium Tetrasulfide Na_2S_4; 174.23	Aqueous solution containing 40% by weight of compound. Clear, dark red liquid. Reducing organic nitro bodies; manufacture of sulfur dyes; insecticides and fungicides; ore flotation reagent; soaking hides and skins; preparation of metal sulfide finishes.
Sulfur Dichloride SCl_2; 103	Dark brown or reddish liquid. Sp. Gr. 1.638±.005. Decomposes above 40°C. 66% Min. Cl_2 content. Chlorinating agent, in manufacture of organic acid anhydrides and in organic synthesis.
Sulfur Monochloride S_2Cl_2; 135	Yellow to slightly reddish liquid. Sp. Gr. 1.690±.005. B. P. 138°C. 50% Min. Cl_2 content. Manufacture of insecticides, linseed oil substitutes, dye intermediates, pharmaceuticals, organic acid chlorides.
Thionyl Chloride Refined and Technical $SOCl_2$; 119	Colorless to yellow or pale red liquid. Sp. Gr. 1.644. B. R. Tech. 72° to 79°C. B. R. Refined 75° to 78°C. Chlorinating agent. Forms organic acid chlorides and anhydrides, alkyl chlorides from corresponding alcohols.
Sulfuryl Chloride SO_2Cl_2; 135.0	Light yellow liquid. Sp. Gr. 1.680. B. R. 2° including 69.1°C. Chlorinating agent to produce chlorphenol and other chlorination reactions in organic synthesis. Forms chlorides and anhydrides of organic acids.

HOOKER ELECTROCHEMICAL COMPANY

13 Forty-seventh Street — Niagara Falls, N. Y.

NEW YORK, N. Y. — TACOMA, WASH.

WILMINGTON, CALIF.

HOOKER CHEMICALS

Caustic Soda — **Muriatic Acid** — **Sodium Sulfide**

Paradichlorbenzene — **Chlorine** — **Sodium Sulfhydrate**

8352

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Antoine Chiris was established in France in 1768 and all through these years pioneered in the development of its long-known worldwide organizations. The American branch was established in New York in 1899.

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A GOOD LISTENER

Your Empire Box Corporation salesman is a good listener

He's ALL EARS when the talk turns to cartons; because supplying you with cartons is his life-work. As he is a specialist, so is the firm that he represents. Empire Box Corporation has the mills, the materials, the men and the machines—all for the purpose of bringing you a better *carton. Call in your Empire Salesman* now *and* let the talk turn to cartons.

Empire counts among its clients many leaders in the field because . . . Empire delivers the goods.

Empire Box Corporation

PLANTS: GARFIELD, N. J. • SOUTH BEND, IND. • STROUDSBURG, PA.

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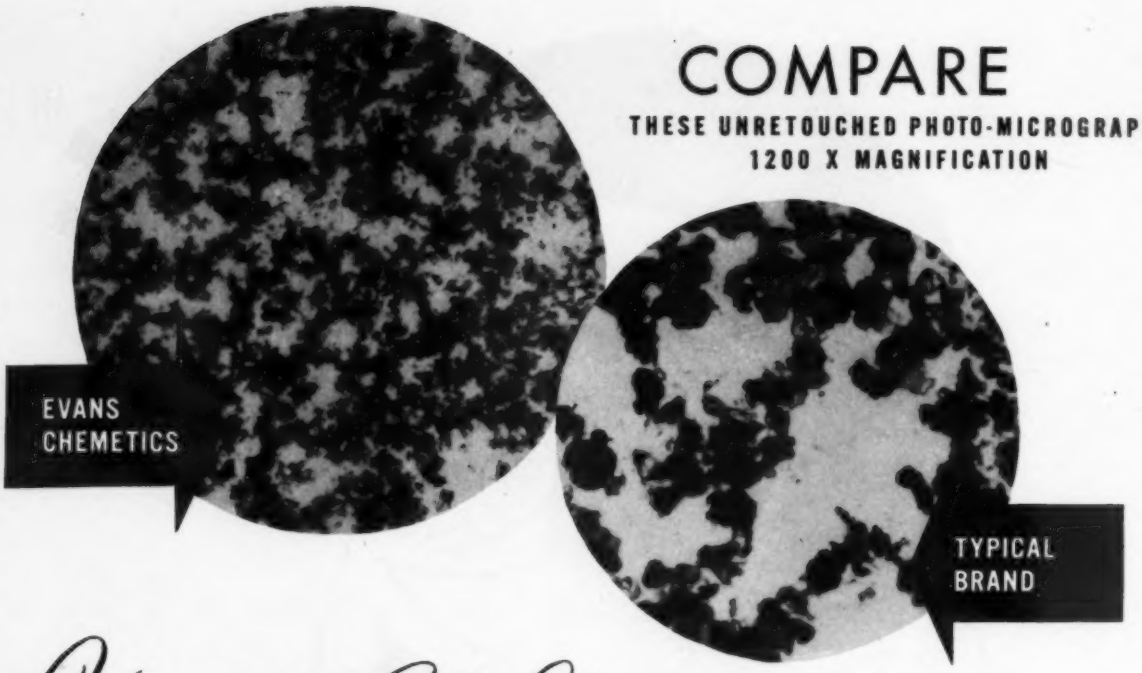
COMPARE

THESE UNRETOUCHED PHOTO-MICROGRAPHS
1200 X MAGNIFICATION



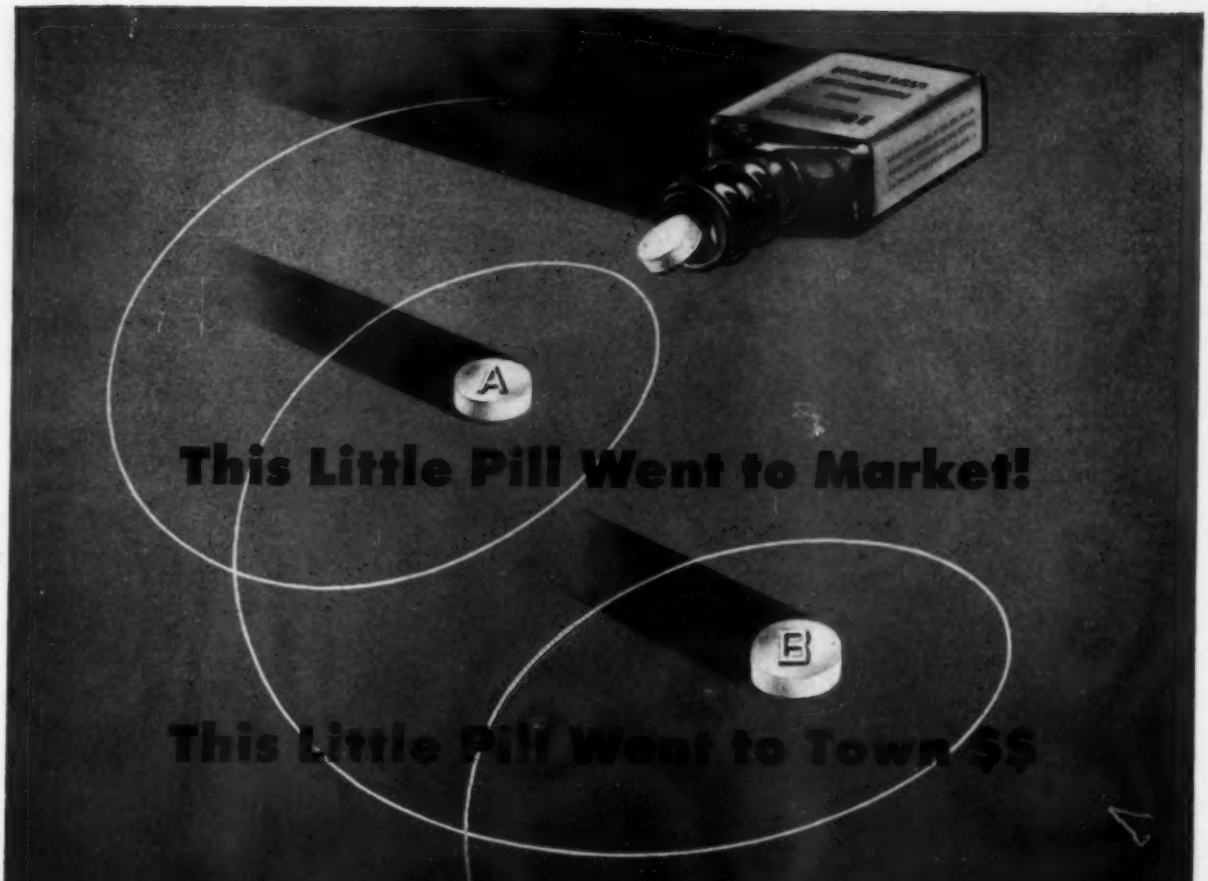
Humectic Cake Make-up—

A study of these photo-micrographs proves Humectic Cake Make-Up to be a finer product in uniformity of film, particle size, and dispersion. The successful development and incorporation of Humectol in the formulation provides a cake make-up that you can honestly say is non-drying to the skin; it can be used repeatedly day after day and still leave the skin smooth, comfortable and relaxed. Facilities are complete to produce and package under your label, in volume. Samples and complete details await your inquiry.

Evans Chemetics INC.

250 EAST 43rd STREET, NEW YORK 17, N. Y.

In England, Evans Chemicals, Limited



Hmm . . . they look alike! Now let's compare the contents. Identical!
Now let's taste "A". Fishy! Well, what do you expect of Cod Liver Oil Tablets?
How about "B"? Marvelous—no "fish" taste . . . easy to take as candy!

There you have the secret of the success of Brand "B". More flavor appeal through the use of MM&R Flavor Oils to mask the sales-retarding "fish" taste of the Cod Liver Oil.
Apparent, as manufacturers scramble for post-war markets, are new, sales-stimulating uses of ESSENTIAL OILS AND BASIC FLAVOR AND PERFUME OILS . . . significant, provocative uses to provide countless products with the distinctive odor and flavor personality necessary to build consumer preference.

As one of America's great suppliers of Essential Oils and Basic Flavor and Perfume Oils, MAGNUS, MABEE & REYNARD INC. offers you more than a half century of know-how in solving odor and flavor problems . . . in sparking old products and new with extra taste and odor appeal.

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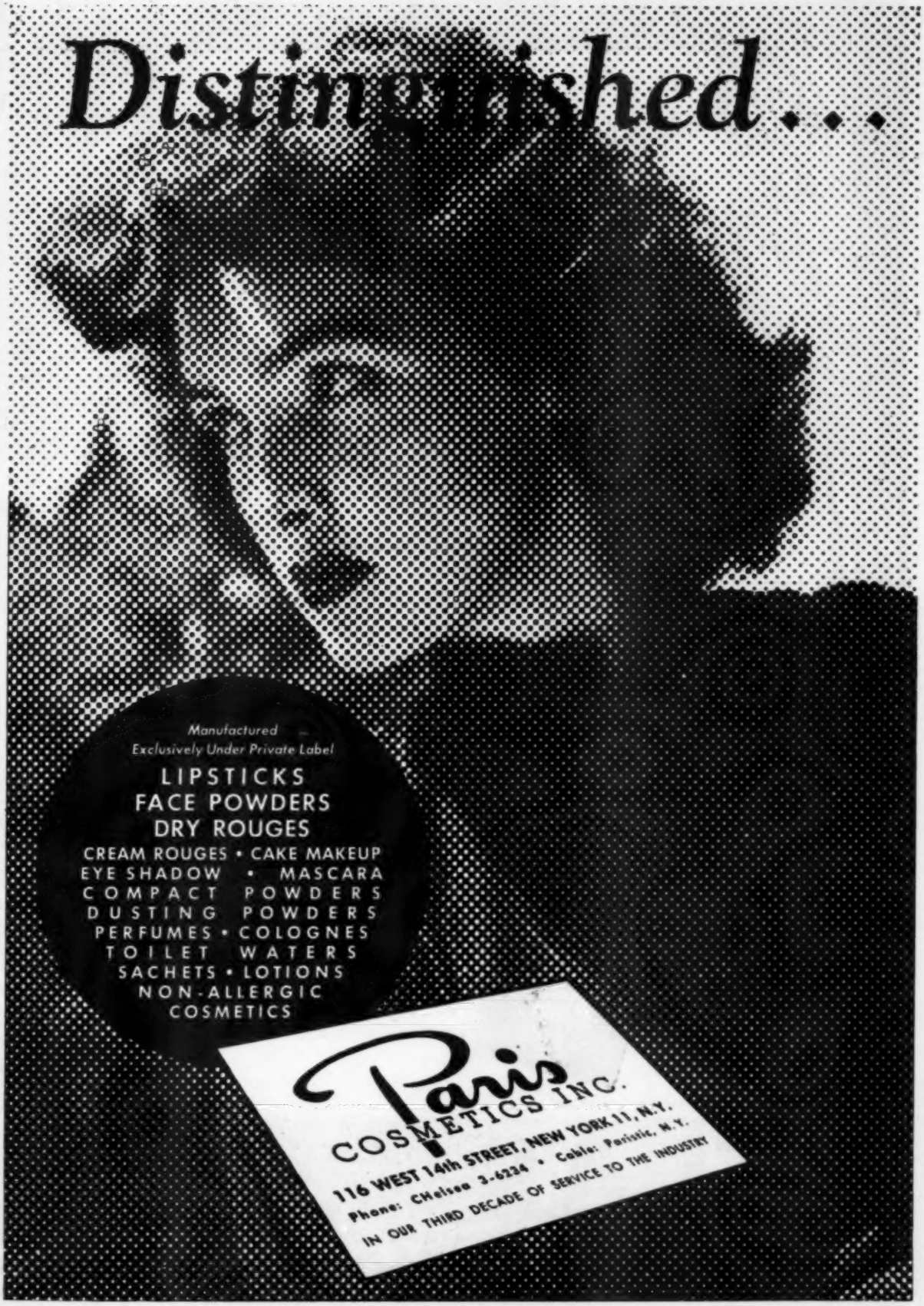
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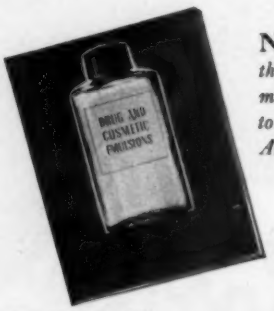

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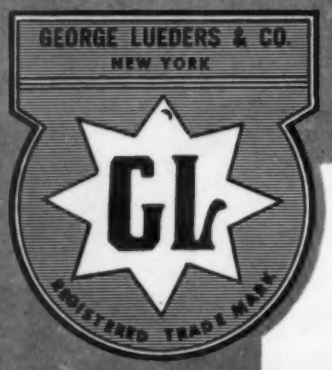

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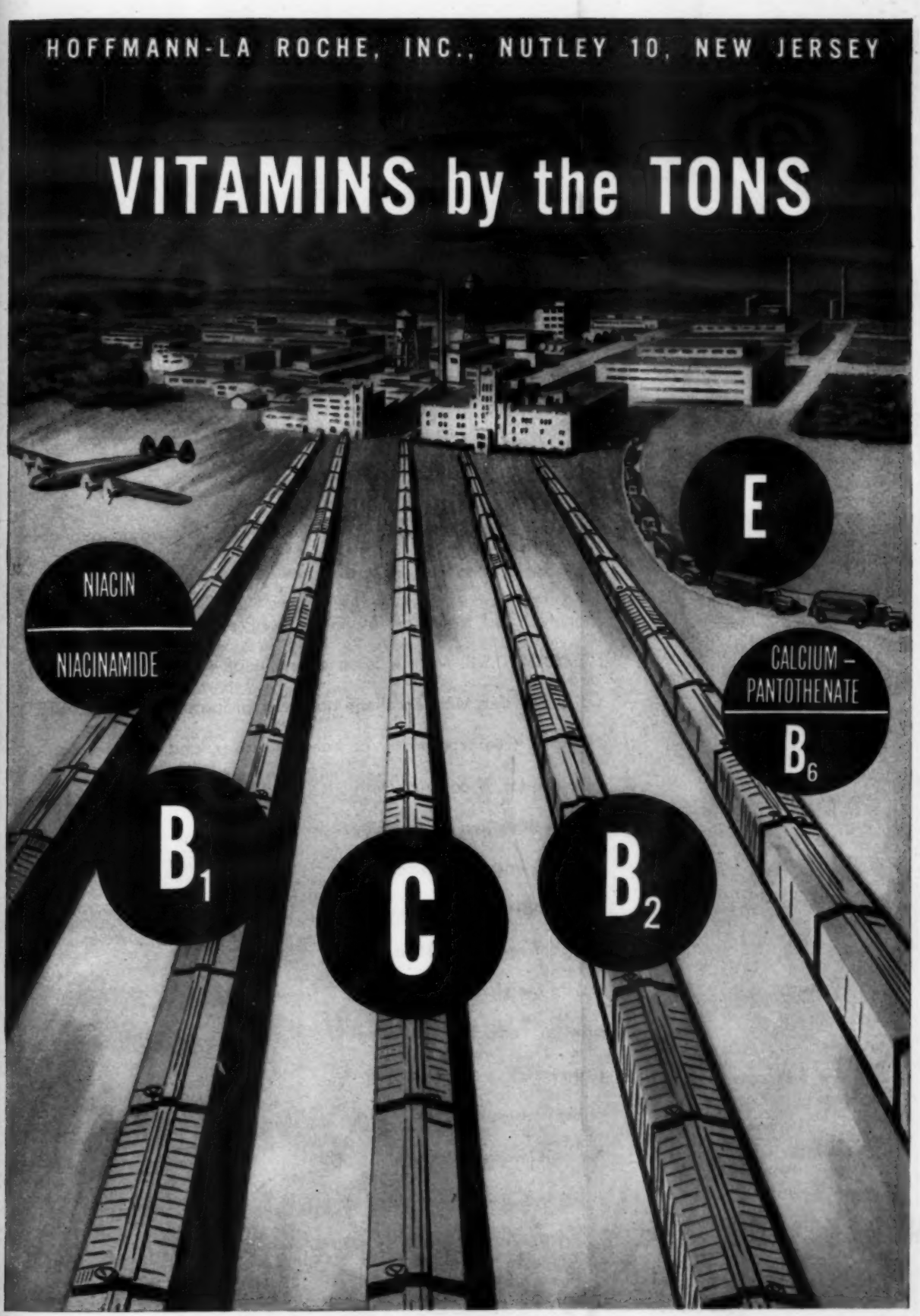
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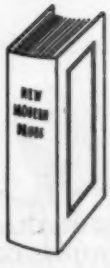

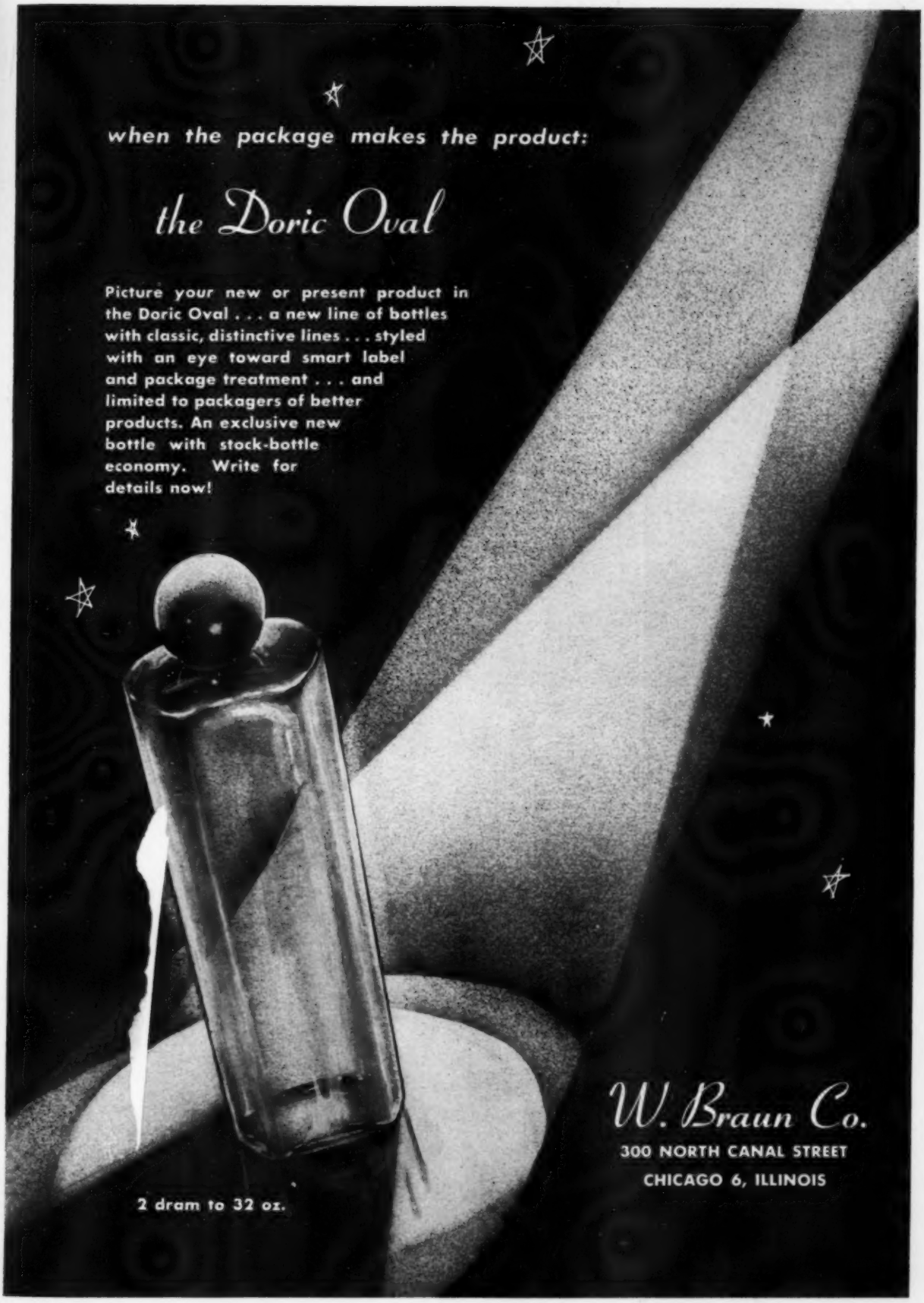
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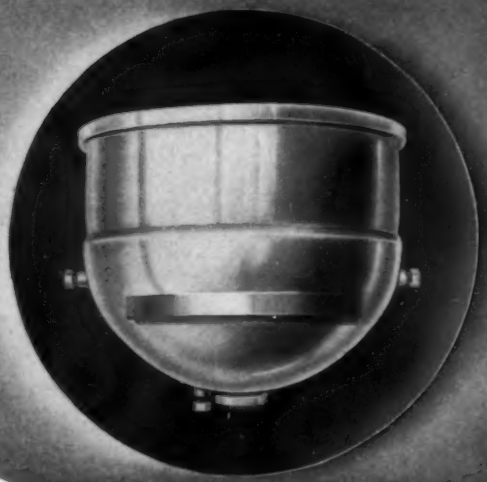

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Mixture of Oleic, Napthenic, and Cocoanut Fatty Acids, representing a metallic soap compound. 971,850 lbs., Denver, Colorado. 216,200 lbs., Birmingham, Alabama. Packed in drums, price $.10 per lb. in carload lots and $.12 per lb. l.c.l.

One of the most important of the Surplus Disposal jobs assigned to the War Assets Corporation, a subsidiary of RFC, is the selling . . . *now* . . . of a large and varied stock of Surplus Chemicals. These chemicals represent a tremendous Government investment, but *they are priced for quick sale and represent real values to industrial users!*

Because of space limitations, only a few of the major items are offered in this advertisement. If you are interested in any of the items offered here, write, wire or telephone the RFC Agency Office listed below, where the stock is located. Act quickly! All items offered are F. O. B. Location. Credit terms may be arranged.

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and have your name placed on our regular mailing list by mailing the attached coupon.

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To War Assets Corporation:

Please send me further information on the following products:

- ☐ Glacial Acetic Acid, CP, 10,067 gallons in one-gallon bottles, San Francisco, Calif., price $1.00 per gal.
- ☐ Glacial Acetic Acid, CP, 1,416 gallons in one-gallon bottles, Portland, Oregon, price $1.00 per gal.
- ☐ Bakelite rods and sheets, large quantities, various sizes and dimensions, Philadelphia, Pa.
- ☐ Copper Naptnenate, 28,212 lbs., 8% solution, in drums, Cleveland, Ohio, price $.12 per lb.
- ☐ Copper Napthenate, 22,220 lbs., 8% solution, in drums, Nashville, Tennessee, price $.12 per lb.
- ☐ Copper Napthenate, 10,037 lbs., 8% solution, metal drums, Charlotte, N. Carolina, price $.12 per lb.
- ☐ Copper Napthenate, 6,613 lbs., 8% solution, in drums, Birmingham, Ala., price $.12 per lb.
- ☐ Sodium Sulphite, 492,000 lbs., 100-lb. bags, Nashville, Tenn., price $30.00 per ton.
- ☐ Manganous Chloride, 100 short tons, in bulk, Salt Lake City, Utah, price $50.00 per ton.

Firm .....

Street .....

City ..... State .....

(185-1)

Contact your nearest RFC Agency Office listed below for information, regarding *all* surplus materials. If your local RFC office does not have all the materials you need, it will endeavor to locate them from other offices throughout the country.

PAINTS

PROTEIN BINDER COLD WATER CAMOUFLAGE PAINT, TYPE I

Specification: ES-T-1093
Colors: Burnt Sienna, Burnt Umber, Deep Green, Blue, Chrome Oxide Green, Iron Oxide Red, Earth Red
Packed in 5 pound cartons
Richmond, Virginia
Price: 2¢ per pound

OLEORESINOUS (EMULSIFIABLE) CAMOUFLAGE PAINT

Specification: T-1279
Color: Olive Drab
Packed in 5 gallon containers
San Francisco, California
Price: 65¢ per gallon
Minimum sale: 200 gallons

OIL TYPE READY MIXED CAMOUFLAGE PAINT

Specification: T-1215
Colors: Olive Drab, Loam, Earth Brown, Field Drab, Earth Red, Dark Green
Packed mostly in 5 gallon containers
San Francisco, California
Price: 65¢ per gallon
Minimum sale: 200 gallons of any one color

CAMOUFLAGE LACQUER

Specification: M-485 & M-485 C. Colors: Light Gray & Blue Gray
Packed in 5 gallon containers
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Price: 50¢ per gallon

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Specification: 3-109-E
Color: Olive Drab
Packed in 30 gallon drums
Chicago, Illinois
Price: 50¢ per gallon

A DISPOSAL AGENCY DESIGNATED BY THE SURPLUS PROPERTY ADMINISTRATION for Surplus Producers' and Capital Goods, Aircraft and Plants formerly handled by Reconstruction Finance Corporation . . . and for Surplus Consumer Goods formerly handled by United States Department of Commerce.

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(A SUBSIDIARY OF RECONSTRUCTION FINANCE CORPORATION)

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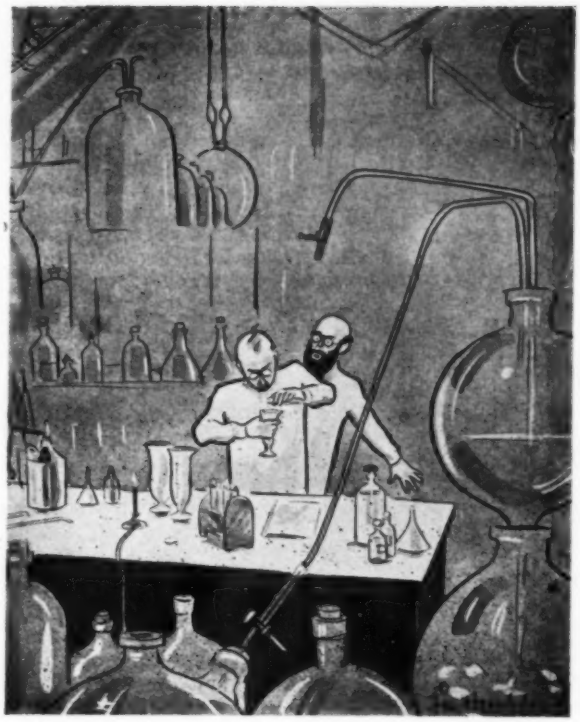


"My wife said, 'I should think a high-priced chemist like you could analyze your own urine.'"

KEEPING POSTED

Will Mergers Be Blocked?

WITH the purchase of companies by other companies proceeding at an extremely rapid rate as companies try to buy distribution, going plants, and most of all time, there is a bill in Washington that will cause much interference with this procedure if it is enacted. The bill, which is said to have an excellent change of becoming law, is the Kefauver bill which has been reported out of the Judiciary Committee of the House and which will probably pass the House without the slightest trouble. This bill provides, among other things, that whenever the consummation of a plan would result in the common control of corporations which make "sales aggregating 5 per centum or more of the total sales in the particular line or lines of commerce during the calendar year preceding the acquisition" such plan shall not be consummated without the approval of the Federal Trade Commission, if the corporation is one which is subject to the FTC under sections 7 and 11 of the Clayton Act. Other agencies of the Government such as the Interstate Commerce Commission, the Federal Communications Commission, the Federal Reserve Board, and so forth would control in the cases of corporations which come within their jurisdiction.

Permission to consummate a plan involves a finding by the FTC that "consummation of the acquisition would be consistent with the public interest." It is provided that the FTC shall not make a finding unless it also finds:

"(a) that the acquisition will not substantially lessen competition, restrain trade, or tend to create a monopoly (either in a single section of the country or in the country as a whole) in the trade, industry, or line of commerce in which such corporations are engaged;

"(b) that the size of the acquiring corporation after the acquisition will be compatible with the existence and maintenance of effective competition in the trade, industry, or line of commerce in which it is engaged;

"(c) that the acquisition will not so reduce the number of competing companies in the trade, industry, or line of commerce affected as materially to lessen the effectiveness of competition therein;

"(d) that the acquiring corporation has not, to induce the acquisition or to eliminate the competition of the corporation sought to be acquired, indulged in unfair methods of competition in violation of the Federal Trade Commission Act, as amended."

If the Commission finds that the contemplated acquisition is not consistent with the public interest, the Commission shall enter an order requiring the parties to cease and desist from the consummation. The same appeal to the Circuit Court as in other FTC cases is allowed, but this will not get anyone very far.

Chairman of the Judiciary Committee of the House Hatton Sumners of Texas says that if "big business has any sense, it will get behind this bill." One of the features of the bill is that a man cannot sell his own business if he wants to and many people are particularly anxious to dispose of their businesses after they have built them up and have reached an age at which they desire to retire.

Representative Sumners is said to be very influential in the House and passage of the bill through the House is anticipated for this reason alone. Senator McCarran will take the bill up in the Senate and he is expected to put his influence behind it as he and Sumners work very closely. So look out, you may not be able to sell out your business even though you want to.

Streptomycin Committee

STREPTOMYCIN producers, who are continually being harassed by demands for quantities of the drug which they haven't got, have formed a Producers Industry Advisory Committee to cooperate with the Civilian Production Administration in promoting production of the drug and in planning distribution of such supplies as are available. While plants for production of stryptomycin are projected, production at present is on pilot plant scale and production at present does not exceed 10 or 15 billion units per month. Firms represented on the advisory committee are: Abbott, Lilly, Heyden, Parke Davis, Merck, Pfizer, Squibb, Upjohn, Commercial Solvents, and Schenley.

Industry Lawyers Meet

HIGHLY interesting, particularly to those interested in the legal angles of this industry, was the meeting of the Section on Food, Drug, and Cosmetic Law of the New York State Bar Association recently held in New York. The section was organized last year under the instigation of Charles Wesley Dunn. Papers of interest to manufacturers and distributors in this industry were: Validity of the Demonstrator Practice, J. Howard Carter, attorney in the Elizabeth Arden demonstrator litigation; State Fair Trade and Unfair Practices Legislation, Harold Harper, counsel for the NWDA; The Food, Drug, and Cosmetic Law, Charles Wesley Dunn, counsel for the APMA; The Drug Law, James F. Hoge, counsel for the Proprietary Association; The Cosmetic Law, Hugo Mock, counsel for the Toilet Goods Association; Administration of the Food, Drug, and Cosmetic Act, FDA Associate Commissioner Charles W. Crawford; New Drug Provisions, Carl M. Anderson, of counsel for Merck and counsel for Drug, Chemical and Allied Trades Section of New York Board of Trade; Slack-Filled Package Provisions, Franklin M. Depew, of counsel for Standard Brands; Product Liability Law, Bradshaw Mintener, counsel for Pillsbury Mills.

Surplus to Total $52 Billion

SOME idea of the cost of war and some idea of where our large national debt came from is indicated by the estimate that surplus Government property as a result of the war will reach $52 billion by June 1947. However, of this enormous total, only $28½ billion will hit the domestic market as a total of $15 billion will be located abroad, and $9 billion will be unsalable aircraft surplus property. Domestically, plants and industrial real property will total $11 billion, production materials and equipment, $5½ billion, consumer goods, $4¾ billion, agricultural land, $2½ billion, aircraft parts and components $1½ billion. Airports will amount to $1 billion, properties in territories and possessions, $701 millions, community facilities, $600 million, marine equipment, $297 million, foodstuffs and agricultural products, $93 million.

American Money for Soviet Penicillin Plant

THE Hugh Cabot Memorial Fund has announced plans to erect in Russia through the voluntary contributions of citizens of the United States a penicillin research laboratory and plant costing $2,000,000.00. The campaign was launched at a dinner held February 13 in Boston, under the direction of Dr. Harlow Shapley, director of the Harvard Observatory and chairman of the fund's national committee. Sponsors of the project include Mrs. Franklin D. Roosevelt, Thurman W. Arnold, Dr. Charles Kettering, Dr. J. Robert Oppenheimer, and Igor Sikorsky.

Do All by Laws

IF CONGRESS passes the President's Full Employment Bill, assuring everyone in the United States a job at a nice minimum pay for the rest of his life, it would only be logical for Congress to pass a bill preventing all diseases. The only trouble with this would be that it would be illegal to be sick, to make, sell, or use drugs, or to conduct medical research. But on second thought maybe one could be legally sick under such a law, just as one could be arrested for being drunk during prohibition when the constitution stated that there could be no intoxicating liquors in the country.

Probably His Own Fault

WE HEAR that an essential oil salesman, who just missed getting his wife a pair of nylon stockings in the mad rush when Gimbel's sold some 26,000 pairs, remarked ruefully to a friend, "I haven't been able to lay my hand on a nylon stocking for three years."

Just Quick Turnover

NEWSPAPER reports of huge stocks of men's clothing held in warehouses set us off on an investigation of sequestered stocks of drugs and cosmetics. All we found were loud complaints from manufacturers that buyers won't let the labels dry on the bottles.

Interesting Figures

STATISTICS are generally referred to as "boring things", and Martin J. Tauger, director of purchases of Associated Distributors, Chicago, so referred to them when he presented them in the following interesting form at the annual sales meeting of the company:

Board Requirements—The next time you are blocked at a railroad crossing by a passing freight train, remember this—it might be pulling the 90 over-loaded cars required to haul the board necessary for the displays and corrugated cartons used for shipping all the precious Chen Yu, 5-Day, Mme. Huntingford, De Wans, and White Shoulders merchandise to your stores.

Boxes for Nail Lacquer—If aeronautical design gets to the point where an airplane can fly 25 miles above the earth, the tail of this hypothetical plane would knock off the last box of our nail lacquer if the boxes were piled one on top of the other.

Ink—As to the amount of ink required for all of our printing matter, just picture a caravan of 200 camels, each carrying 250 pounds on its back and stretching out for a distance of over a mile across the Sahara sands.

Paper—If the huge quantity of paper required for printing labels and advertising pieces was converted into rolls of the proper size (with 1,000 sheets to a roll) we would have enough rolls to supply the needs of our Chicago office and plant for the next half a century.

Glassware—We have been pulling some statistics as to the number of bottles that you have sold this year and have come up with an amazing figure. We're not going to worry about camels or freight trains this time, however, I would like to mention that the quantity of bottles needed to fill the demands of your customers

is so great that if the bottles were laid end to end the distance from the beginning of the first bottle to the end of the last bottle would be a distance of approximately 565 miles.

Caps—Plastics today is one of the most advanced industries so far as high speed automatic equipment is concerned. Nothwithstanding this, our cap requirements are sufficient to keep five 50 ton automatic molding machines running simultaneously, day in and day out, during the entire year to turn out the millions of caps that your customer-demand requires.

Anything Can be Proven

AFTER observing the statistical methods used in Washington to show that the cost of living in this country has risen by only 3 per cent, we decided to estimate the rise in cost of raw materials used by this industry. Using as an index Java citronella oil, natural camphor, Java cinchona bark, Czechoslovakian cut glass perfume bottles, brass compact cases, and pure tin collapsible tubes, we decided that the increase is practically nil.

Vitamin A Synthesized

RECENTLY the fact was revealed that synthesis of vitamin A was discovered during the early part of the war, but the news was kept secret. All will recall how the war interfered with the shipping industry and that this curtailed our supplies of vitamin A to the point which it became necessary to limit the vitamin A potency of vitamin preparations. Now it appears that we were becoming independent of fish as a source of supply of this important vitamin. Before the war in 1937, one of Germany's leading organic chemists, Richard Kuhn, announced synthesis of vitamin A. However, attempts by other scientists in Germany and other countries to synthesize the vitamin by the process announced were entirely unsuccessful. Massachusetts Institute of Technology workers, who discovered the present process, state that it involves seven to eight steps in which beta-ionone, ethyl chloroacetate, acetylene, and derivatives of beta-hydroxy-butanone-2 are the principal raw materials used. Starting from beta-ionone the vitamin A active product is produced in an overall yield of 10-15 per cent. Biological potency of the product is only one-tenth to one-thirtieth that of pure vitamin A crystals obtained from natural sources, but is 50 to 100 times greater than that of ordinary cod liver oil. The process still has to be translated from the laboratory to commercial production.

Surplus Toilet Goods—$3,000,000

SURPLUS toilet goods were offered for sale last month by the War Assets Corp. Some idea of the size of the offering is indicated from the following quantities: 15,000,000 cakes of toilet soap, 4,000,000 cakes of laundry soap, 900,000 jars of petroleum jelly, 1,500,000 tubes of lather shaving cream, 2,000,000 cans of antiseptic powder, 7,000,000 tubes of tooth paste, 2,500,000 cans of tooth powder, over 500,000 bottles of skin lotion. The great majority of these goods are famous brands. First choice went to priority claimants, including veterans, for a period of 17 days. The goods were valued at $3,000,000.

Will "Switching" Come to an End?

JOHN DARGAVEL, the well known executive secretary of the NARD, is now warning independent retail druggists that a sure-fire way to drive a customer into a self-service supermarket where he can buy what he wants without interference, to try substituting or "switching". He says, "Remember that, from now on, the customer will again be King. The seller's market is over, the buyer's market is here. From now on, the old slogan will prevail 'the customer is always right'—whether or not, in every instance, he happens to be. Any business that is not operated on that basis is doomed to failure. At any rate, the customer is always right in expecting you to sell him what he wants to buy, not what *you* want him to buy. It is his inalienable right to choose, and it is your unalterable duty to sell him what he wants."

Control Of Patent Abuses

WITH regard to the patent system of this country, Assistant U. S. Attorney General Wendell Berge suggests a nebulous sort of a scheme to control abuse of the patent system. His scheme is "that where a court has found and decreed that patents have been misused in a given situation, the court should likewise decree that those patents by virtue of the misuse shall no longer be enforceable. This places the responsibility on the patent owner to limit his claims to the invention covered by his grant and is a recognition that the threat of enforcement is the coercive element of the patent. Patents, after all, are grants of property by the United States and it seems to me to be appropriate to say that if this property is used contrary to the very purpose of the grant and the constitutional provision which makes it possible, then the Government which gave the property has the right to terminate its enforceability for the good of the public as a whole."

This is all very interesting and high-sounding, but who is to know just what are the abuses which would call for invalidation of a patent. That patent rights have been abused, all will agree, but the holder of a patent must be in a position to know just what constitutes abuse of patent rights and what does not constitute abuse. Oftimes the patent owner is hailed into court and charged with having misused his patent rights in some new way that had never occurred to anybody before and is a new idea of some Government agency. He has to defend himself all through the courts and in the end might lose his patent through a new application of some law into which some Government agency reads a new meaning. And even though the patent owner does in the end successfully defend his patent against this attack, he is forced to spend an enormous amount of time and money in fighting an attack that never should been brought against him.

Penicillin Prospects

PENICILLIN production during 1945 reached an estimated total of 7,100 billion units, or more than four times the 1,633 billion produced in 1944. December production topped 800 billion and makers are shooting for a monthly output of 1,000 billion, or 12,000 billion per year. Because of the shortage in this country, exports were held down to 200 billion units for January.

Incidently we hear that a certain company has some new angles on penicillin production that will bring such a flood of the drug that all shortages and possibilities of shortages will vanish into thin air. But more about this later.

Compulsory Sickness Insurance in States

WHILE the Murray-Wagner-Dingell Bill for compulsory sickness insurance is being considered in Congress, New York State legislators are introducing bills to accomplish the same purpose on a State basis. Two bills were introduced in the New York State legislature at the beginning of the session,—one sponsored by the Democratic party, and the other by the State Federation of Labor—and a third bill, backed by the Republican party (which party has control of the State) was anticipated.

The Democratic Bill, naturally enough patterned after the Murray-Wagner-Dingell Bill, would provide paid-up medical care for all persons who have resided in the State for a year or more, and it would be financed by a tax of 1½ per cent to be paid by all employers and all employees on individual earnings up to $3,600.00 a year. Self-employed persons would contribute 3 per cent of their earnings up to $3,600.00 per year. All unemployed persons receiving aid from public-welfare agencies would have their contributions paid by such agencies. The State would pay the cost of administration. It is estimated that on the basis of present payrolls this plan would provide $500,000,000.00 a year for the medical-care fund.

The Federation of Labor Bill would apply to all employed persons and provide that after a week's illness they would receive weekly cash benefits of $15.00 to $21.00 for twenty-six weeks. Maternity benefits would be paid for six weeks. This bill would levy a payroll tax of 0.5 per cent on all employers, with employees contributing nothing.

Essential Oil Standards

THE Scientific Section of the Essential Oil Association of U. S. A. is now engaged in the most important work of developing a Book of Standards acceptable to the entire industry and covering those products which do not appear in the official compendia but which are of outstanding importance to the industry. In January, at the annual meeting of the association, four of these unofficial monographs were presented for consideration and approval of the membership, these monographs covering oil bois de rose Brazilian, oil petitgrain Paraguay, oil spike lavender, and hydroxycitronellal. The Scientific Section of the association is constantly busy in aiding the revision committees of the U. S. P. and the N. F. in the preparation of the monographs of those oils and products of the industry as are listed in these official compendia.

New Interesting Chemical

A NEW hormone-like chemical, called 2, 4-Di for short but bearing the full title of 2, 4-Dicholophenoxyacetic acid, will kill weeds such as dandelion, morning glory, thistle, and burdock without harming ordinary grass, as well as killing ragweed which is responsible for 90 per cent of the hay fever of the country. The product may save millions of dollars in the maintenance of golf greens, and may greatly decrease the amount of hay fever in the country. The product can also rid wheat fields of weeds without harming the grain, but it is deadly to cotton, tobacco, vegetables, and some other crops. It is not a plant poison but promotes growth and it will ripen bananas after they are picked, and it hastens ripening of green apples, pears, and other fruits. It makes apples cling to the trees longer than usual at harvest time, thereby saving much fruit from being bruised.

Frisco Pharmacists Wage Demands

PHARMACISTS in San Francisco, through their union, are now seeking a 40 hour week and a $250 per month basic wage. Present monthly basic wage is $250, but the work is 48 hours.

Broadcasting in Canada

CANADIAN Broadcasting Corporation's examiners of advertising statements will not allow use of the words "wonderful", "ideal", "amazing", "extraordinary", "magical", and "miraculous". The claim "doctors recommend" should be avoided. "See your doctors", or "ask your doctor's advice" or similar terms are permitted if the impression is not created that the doctor will or does prescribe a preparation. Funny that the word "magic", and several or the other words banned in Canada are quite frequently used in this country.

Vitamin D Patents Abandoned

THE patents of Wisconsin Alumni Research Foundation covering methods of production of vitamin D by artificial means have now been dedicated to the public as the result of a suit brought against the Foundation by the Government. Whether these patents were valid or not was highly questionable since in 1943 the Federal District Court at Los Angeles upheld the patents, while on appeal of the case the Circuit Court at San Francisco held the patents were invalid. The Foundation then appealed to the U. S. Supreme Court, but twice last year the high court refused to review the case.

The dedication of the patents to the public came as consent judgment to end a civil anti-trust suit against the foundation and seventeen concerns operating under the patents. The Government charged the foundation and seventeen "of its so-called licensees with unlawfully conspiring to restrain and monopolize trade and commerce in vitamin D and vitamin D products. The decree enjoins the Foundation from instituting suits for infringement or to collect royalties based upon any of the patents dedicated to the public, and from entering into any future licensing of patents relating to vitamin D which provide for price-fixing or impose restrictions on the manufacture, use or sale of vitamin D or vitamin D_2 products.

After-Shave is Cosmetic

THE use of the words "after shaving" in any manner in the labeling of a preparation definitely classifies the product as a cosmetic subject to the excise tax in the opinion of Treasury Department of officials. Recently a manufacturer of a liquid antiseptic wanted to include in his circular reference to use of the product as an after-shave because the product would be of value in relieving skin irritations, small nicks, cuts and scratches that might follow shaving. He was told that the mere use of the words classified the product as a cosmetic.

Wants FDA to Control Advertising

CHARLES WESLEY DUNN, counsel for the APMA, called for the transfer of control over advertising from the Federal Trade Commission to the Food and Drug Administration so as to end the unsatisfactory condition of dual enforcement by two Government agencies. Addressing the Section on Food, Drug, and Cosmetic Law of the New York State Bar Association, Mr. Dunn said that the emasculation of the advertising provision from the Food, Drug and Cosmetic Act and the consequent enactment of the Wheeler-Lea Act was poor statesmanship, and that it should be corrected.

Labeling Difficulties

JUST what the words "relief" ,"remedy", and some other expressions mean in the labeling of a drug has been defined on various occasions by judges of the Federal courts. Recently a Federal judge charged the jury as follows:

"The term 'relief' is not of definitive connotation or entirely free from ambiguity; in a common sense it connotes permanent removal of organic or functional disturbance as distinguished from alleviation of discomfort. The representation that an article or drug is 'for' or a 'treatment for' a disease is equivalent to labeling it as a cure or remedy."

Another Federal judge on a previous occasion said:

"The word 'remedy' in its ordinary sense means that which cures disease, any medicine or application which puts an end to disease and restores health."

And still another judge said:

"Interpreting it as ordinary intelligent men would, does it convey the impression that the medicine will cure or act as a remedy for the disease or ailments mentioned even where the language does not directly say so."

In discussing the words "recommended for" another court said:

"It seems to us that the words 'Recommended in the treatment of Bright's Disease, etc.,' could only mean that the use of the water in the treatment of the diseases named would effect a cure or alleviation of such diseases, otherwise why recommend it? Unless this means that the water did contain elements or ingredients which would alleviate or cure the diseases named, when taken according to directions . . . . it was a waste of printer's ink."

In another instance a manufacturer modified his labeling to remove the word "cure" and substituted the word "for" only to be told by the court.

"If you can find it to be a fact, as I believe you can, that a former label used the word 'cure', you have a right to consider why the change was made and why no other change was made than merely from the word 'cure' to the word 'for'."

With reference to the possibility of overcoming these objections of the courts to the expressions mentioned, the FDA has apparently at times leaned toward the addition of the word "temporary" in conjunction with the word "relief". However, in a case in which the Federal Trade Commission required the manufacturer to use the word "temporary" in conjunction with the word "relief", the circuit court said:

"We are of the opinion that the word 'temporary' . . . should be eliminated. We see no reason why petitioner should not be permitted to represent its product as a relief for itching. It does not cure either the itch or its cause; but it does afford relief. One of the definitions given by Webster for the word 'relief' is 'lessens evil, pain, etc.' The words 'relief from itching' could, in our minds, carry no implication to the public that the product was a permanent cure either for the symptom or the disease. The word 'temporary' carries an uncertain meaning. As the Commission doctor stated: 'It might mean a few minutes, or an hour or so.' To require its use would serve no purpose in the protection of the public, but might limit petitioner in truthfully representing its products."

Therefore, the crux of the matter seems to be what diseases or conditions the product is held out as a 'remedy' or 'relief' for. A product might be labelled as a relief for the certain symptoms of a disease or condition just as itching to a symptom of a disease or condition.

Filling Teeth With Glass

WHEN chemists and other professional men get together one never knows what might happen. Now it is reported that Fiberglas yarn has been successfully used to fill root canals of teeth. Several advantages are claimed for its use by Harry Maeth, D. D. S., among them ability to verify stages of canal filling by X-ray, it is easily handled, it has great tensile strength and high dimensional stability, it is non-toxic, non-irritating, chemically stable, and does not absorb water.

WPB Data Available

ALL the people who sweated over the questionnaires that they were required to fill out for WPB during the war years are now in a position to benefit from the work done by WPB in accumulating this mass of data of the business activities and productive capacities of the countries industries. For this data—with the esception of information that must be kept confidential because it involves only a single company—has been made available to all who desire it. The only difficulty in obtaining the desired information lies in the fact that there are some seventy-five tons of material and they are a bit unmanageable. An office filing cabinet to hold these records would have to have seven drawers, each one of which would be the length of Manhattan Island. However, if one knows what he wants, he can probably find it.

COURTESY THE UPJOHN CO.

LOOKING AHEAD AT DRUGS

THE changes that have been occurring in this industry for some years past are continuing in the same direction despite the occurrence of the war. As a matter of fact, the war, rather than interfering with this trend, has actually speeded it up to a considerable extent. During the war years, drug manufacturers were not only called upon to produce standard products in far greater amounts than ever, but they were also called upon to engage actively in research on development and production of entirely new products. And within this relatively short space of four years, developments and changes in the use of drug products were tremendous in size and scope. Never in so short a time during peaceful years, have there been such swift and complete changes in products demanded for various uses.

When the war broke out in Europe in 1939, the sulfa drugs were relatively new, having been used in this country only since 1933 or 1934. The British started using them in wound treatment with remarkable results. When we entered the war, drug and chemical manufacturers were immediately called upon to produce staggering quantities of these products. Eventually, there was produced in this country 10,000,000 pounds of sulfa drugs within one year. The enormity of this production can only be realized by comparison. Sulfa drugs, which are used only under a doctor's care in relatively small amounts, reached 10,000,000 pounds, while a product like phenophthalein, which is commonly used by laymen as a laxative is produced to a total of only about 600,000 pounds a year, and aspirin, which is a common household drug used by almost everyone, only reached a total of 10,000,000 pounds under the heavy demand of wartime.

As everyone in the industry knows, it was shortly after this enormous production of sulfa drugs was accomplished that penicillin was making its appearance on the stage. And just as the sulfa drugs had displaced a large volume of the biologicals used, so penicillin began to displace a large percentage of the sulfa drugs that were being used. Now we see streptomycin coming into the picture with the probable result that it will partially displace part of the existing demand for both the sulfa drugs and penicillin. This means that the pharmaceutical manufacturers must constantly be adding to their lines as these new products are introduced, and also that they must be constantly adjusting their production and sales quotas of existing products and try to predict what production and sales of the newer products will be. And the changes that have occurred in the items mentioned have been changes with far-reaching effect upon the manufacturers production facilities. For there is no similarity in the production of biologicals, sulfa drugs, and antibiotics such as penicillin and streptomycin. Equipment and

methods of production for all three types of products are entirely different.

However, all of these various types of products have held their places in the practice of medicine although their places have changed somewhat. Biologicals have not suffered a sharp decline for the reason that the use of known ones has been grately extended, and newer ones have come into the picture. Smallpox, diphtheria, tetanus are being eliminated almost completely as the use of biologicals for their prevention is being extended. Injections for the prevention of influenza were definitely proven efficacious by the Army which practically eliminated influenza during the late war by such methods. Measles and other diseases can also be prevented by biologicals and the medical profession is realizing this fact and extending the use of these products to a marked degree.

The sulfa drugs do not appear to be moving ahead so rapidly, and, in fact, some people think that they are now, or will be in the near future, on the decline. It was true that the use of sulfa drugs declined during the war as the Army discontinued the practice of including them in every kit that every soldier carried. The reason given for that was that the medical men in the Army could get to the wounded men so rapidly that immediate treatment of the soldier himself with sulfa drugs was not necessary as the drug had not even taken effect by the time he was picked up by the medical men. But aside from this it is true that with the greatly increased production of penicillin, sulfa drugs are being replaced in many instances, even though it was quite common practice in some branches of the Armed Forces to give both sulfa drugs and pencillin so as to be more certain of a cure. Such a method saved the time and often the necessity of being certain just what germs were responsible for the condition. As the use of penicillin spread and more was known about it, its application by itself increased. Doubtless when streptomycin becomes more freely available it will replace a further amount of sulfa drugs now used and it will probably replace some of the penicillin now used. However, there is good reason why the use of all these drugs should increase despite the fact that they will to some extent replace each other. This is so because medical treatment by specifics is greatly on the increase and more of these drugs will be used for the conditions for which they have proven and will prove to be specifics.

The movement in vitamins is still a forward one with greater consumption of these products predicted despite recent attacks upon their indiscriminate use. Vitamins are still being, and will continue to be, widely prescribed by physicians because of their efficacy in cases which quite often prove to symptoms of vitamin deficiency. Plenty of vitamins might be taken by people who do not actually need the amount or the type of vitamin preparations which they are taking without consulting their physicians, but by and large, in the great majority of instances people are benefiting from the vitamins which they are consuming. Increased research in vitamins as to their proper use and as to ones that have not as yet been produced and used on a large scale will further expand the total amount of business that will be done in these products.

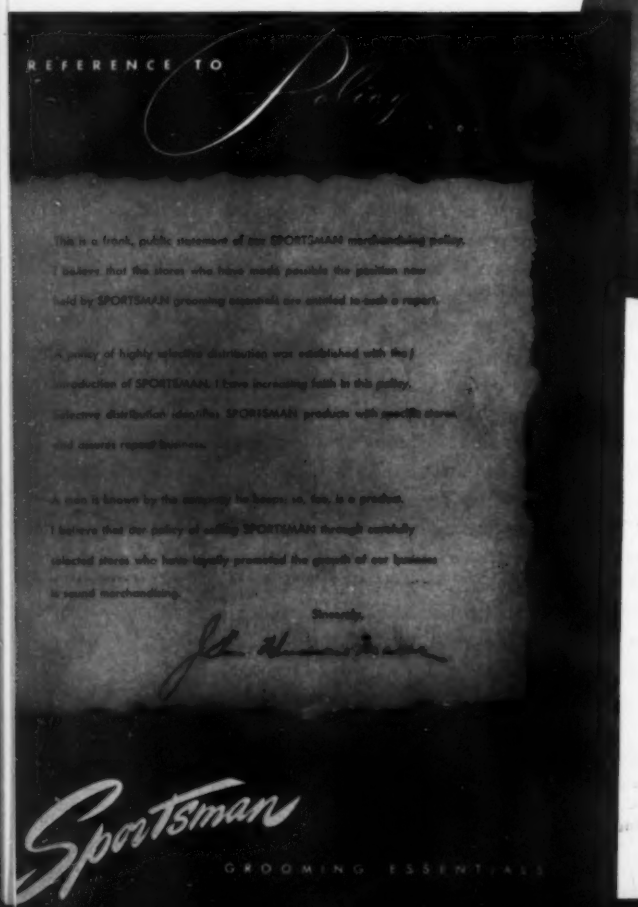
The hormone preparations are also increasing in importance and in use as more is learned about the actual types of these preparations that are being used. The female sex hormones, or estrogens, are now very widely used by physicians in many types of female disorders and in other conditions as well. Likewise, the male sex hormones are increasing in use as physicians find a most pleasing reaction to certain conditions that occur in the males.

By and large, use of drug products will steadily rise despite the threat of socialized medicine, compulsory sickness insurance, or whatever other direction the practice of medicine follows. As people generally learn more about the new so-called "miracle" drugs they become more inclined to consult a physician in any illness that might occur. And the medical practitioner of today is very "drug minded" for the simple reason that he is able to get results from drugs in a steadily increasing number of conditions that for some years were not easily controllable.

Naturally as the more recently discovered drugs are eliminating a very high percentage of the deaths from infectious diseases, degenerative diseases and diseases from infections which are not as yet subject to specific control, rise in importance. Therefore, circulatory diseases have become of far greater importance than they were in the past, and the number of diabetics is on the increase. Also rheumatic heart disease is causing the greatest of concern. Cancer, naturally also becomes of increasing importance.

Swollen individual and corporate incomes from the lush war years have increased the attention which people have paid to their own health conditions and the attention which corporations have paid to the health of their employees. The increase in sickness insurance bought by corporations for their employees, and in some instances also for the dependents of their employees, has greatly increased the number of times that people so protected visit the doctor. An extension of this type of protection will further increase the number of people who visit the doctor for all types of ailments and it will therefore increase the proper use of drugs. And these people will continue to visit the doctor during all sorts of good and bad years so long as they have a job and therefore have this free medical care.

SPORTSMAN



A CASE HISTORY OF SELECTIVE SELLING*

From the day the first idea for Sportsman came to Jack Moore, long before the tedious period of trial and error which finally produced the now well-known package, everyone in the company had accepted as an obvious fact that Sportsman would be sold as a class product in selective distribution. There were several reasons for this conviction. The company, John Hudson Moore, Inc., had grown to a prosperous business importing quality brushes and pipes and had built up an excellent reputation in leading stores. Jack Moore, the president, had long been convinced that a quality product, sold in selective distribution, had more to offer in profits and security than a volume product in mass distribution. And, just about this time, the leading department stores, whose recognition of a new product or a new idea in merchandising carries so much weight with other retailers, were beginning to show an interest in the new beautifully packaged men's toiletries, combining so superbly a masculine and a gift appeal,—an interest which was to avalanche in the next few years into twenty-five million dollars of new additional business for the industry.

Sportsman men's toiletries were introduced to the trade in a striking four-color, four-page insert in Beauty Fashion, in the September, 1941 issue. The response, both from the trade and the public during that Christmas season left no doubt in the minds of anyone in the company or in the industry, that Sportsman had a vitality and an appeal that opened an opportunity to establish one of the great names in cosmetics.

Pearl Harbor brought an accumulation of restrictions that worked with particular severity on a young company or a new product. The great momentum of this first fall season was interrupted and slowed by quotas and shortages in alcohol and packages. Fortunately, the merchandising program had in its original conception called for a highly selective and limited distribution during the first few years. This policy had as its objective a firmly entrenched position in leading department stores in key cities, a cooperative merchandising plan with these stores which would not only permit Sportsman to trade in on the high local consumer prestige and confidence of the stores, but which would build up among other retailers over a wide area, an interest and a strong buying inclination, which would make a later, controlled expansion relatively easy.

The three years which followed enabled the company firmly to entrench Sportsman as one of the three leaders in the top layer of distribution which exerts so potent an influence on general distribution. By the time 1945 arrived, bringing with it some relief in rigid restrictions, the company found Sportsman, leashed now for three years, pressing urgently for expansion.

Nineteen forty-five was the year that men's toiletries became front page news in the daily press and feature article rank in popular magazines. Back of this explosive realization that something new and dramatically interesting had happened in cosmetics, lay many factors which nave had their full share of discussion in the press, in pullmans, bars, tea rooms and director's meetings. But one factor has received very little attention and that is that during these hard years the top retail merchandising brains in the U. S. looked over these new men's lines, tried out the good ones, found that each added effort pays, and by 1945 were already all out in support of this new men's cosmetic field with skillful promotions and new segregated departments. The whole weight of the nationally famous stores, so far as it applied through their cosmetic and men's departments was directed to building mounting interest with the consumer and other retailers in this new aspect of good grooming.

These retail promotions were not all self generated. In fact they lagged badly behind the enthusiasm, the merchandising initiative and the advertising of the leading manufacturers. But by the time 1945 had arrived, men's toiletries were an accepted part of the cosmetic department throughout the retail trade. This department was facing a competition from the men's departments in larger stores and from haberdashery stores that already totaled 15 per cent of the business, and were listening eagerly to such surveys as that of John Hudson Moore, Inc., investigating the feasability of a separate section of masculine appearance for men's toiletries in the toilet goods department and a suitable name, such as

*By Peter Vautin

(Continued on page 283)

Development and Marketing of Pharmaceutical Specialties

By WILLIAM T. DOYLE and A. R. SAVINA

Part II

Origin Of Ideas For New Products

Unfortunately too little attention is given to means of acquiring ideas for new products. Chief reliance appears to be placed upon inspiration rather than on the adoption of a procedure to stimulate ideas. It should be remembered that inspiration usually enters a prepared mind; what is frequently termed inspiration is merely the final step in a sequence of logical steps directed toward a definite goal.

The ideas for new pharmaceutical products may come from different sources, some of which will be discussed. Sometimes bits of information from various sources when put together lead to the formulation of an idea. Therefore, every effort should be made to cultivate close contacts between the departments within a company so as to encourage the development of ideas. Ideas, or pertinent information leading to them, may come from:

(1) *Management:* The origin of many companies can be traced to an idea possessed by the founder or founders, and accordingly the company's first management. As companies grow and become more highly organized, management's numerous functions preclude its being the only or even an important source of ideas for new products. However, management's policies can have a profound effect on the inception and development of ideas by others within the organization. Management's chief role should be to furnish and maintain a favorable environment for the germination and cultivation of ideas. Fields of interest to the company should be carefully delineated, but they should not be too narrow. Chief reliance should be placed on a planned and systematic procedure for conceiving new product possibilities rather than on individual bursts of inspiration. Adequate means should be provided for a full examination and evaluation of ideas, and rewards and recognition for worthwhile ideas should be an integral part of company policy.

(2) *Research Department:* A well-organized research department in a company with a research-minded and progressive management will in the long run prove to be a fertile source of ideas for new products and product improvement. For optimum effectiveness the research department should adopt and adhere to an orderly and systematic plan especially designed to indicate new product possibilities worthy of consideration. Among the steps that such a procedure might embrace are:

(a) Follow up disease and therapeutic trends with the aid of medical literature, insurance company statistics and government health reports.

(b) Maintain an up-to-date file of information on the status of the treatment of important diseases, or symptoms for which medicinal therapy is indicated.

(c) With the aid of periodic surveys follow up market trends in the pharmaceutical field.

(d) Study drugs and drug products in current use with a view to determining their shortcomings and how these might be overcome.

(e) Maintain contacts with practising physicians, clinicians, hospital and university investigators, and pharmacists as a means of keeping abreast of advances in therapy and of the requirements in medicine. This may be accomplished in part by permitting research department members to attend medical and scientific meetings, and also, if possible, to take periodic refresher courses.

(f) Encourage frequent informal discussions on new product possibilities. Many points that would not be disclosed in formal conferences might well be brought up in an informal group gathering. Out of these discussions may crystallize ideas suitable for presentation and evaluation at formal conferences.

(g) At regular and frequent intervals circulate bulletins to executives and research workers with pertinent information on new fields of interest to the company. If prepared with care and thought these bulletins may help to stimulate thinking in profitable channels. Discussions that raise questions should be part

of such bulletins, and may well pave the way for formal consideration of new product ideas.

(h) Always remain on the alert for opportunities to utilize the company's experience and background in research as the basis for new product development. A research project can often be made to pay extra dividends by exploitation of its by-products.

All of the foregoing are steps that even the smallest companies can include as part of their new product development program. Without these steps to furnish a sound basis to guide development work, the success of new product research will be almost wholly dependent upon the fortuitous, or some may prefer to claim intuitive, choice of a winner without the benefit of background data.

(3) *Sales Department:* Coming into contact regularly with druggists and doctors, who being close to the point of application are in perhaps the best position to observe the failings of, or the gaps unfilled by available products, salesmen might be expected to be a good source of ideas for new products. In some instances ideas of considerable merit do originate in the sales department, particularly among the men whose primary function is detailing or special service rather than selling. By and large, however, new product suggestions from the sales department are generally requests for a product like a fast selling competitive item. Nevertheless, salesmen can be instrumental in furnishing much useful information to aid the research and other departments to develop and evaluate new product suggestions. Being close to the market, they can learn much about trends in therapy, fields showing good sales possibilities, and limitations of existing products—information that should prove advantageous to the research department, and to those groups within the company charged with the responsibility of new product development.

Sales management should make it a policy to encourage salesmen to send in information of this character regularly. More than a simple request should be made if worthwhile results are to be expected. Careful thought should be given to the means of enabling the men to furnish the desired information with a minimum expenditure of time. The value of the data collected in this manner will generally be in direct proportion to the time and thought put into preparation of the forms or questionnaires on which the salesmen are to make their reports.

As a further incentive, periodic reports should be made to the salesmen showing what use or disposition has been made of the information sent in. Evidence of interest at the home office will stimulate interest in the men.

Research constitutes one of the most important aids in the development of ethical pharmaceutical specialties. Above, the research building of Abbott Laboratories at North Chicago, Illinois.

(4) *Others:* Ideas may come from other sources although these are of minor nature in the sense that a company would not want to make them the sole basis for its future progress. But since on occasion, ideas of considerable merit may come from these sources, they obviously should not be overlooked.

Physicians from their experience in the diagnosis and treatment of disease may have ideas which they would like to have a pharmaceutical company with the necessary facilities work out and apply. Naturally, not every idea from such a source can be expected to lead to a profitable new product. Like all other ideas these must be evaluated in the customary manner.

Other companies not engaged in the manufacture of pharmaceutical specialties, or not affiliated with such a company, may develop products of possible value in the pharmaceutical field. The progressive pharmaceutical manufacturer will find it to his advantage to cultivate contacts with such companies.

Many individuals working independently frequently approach companies with partially worked out ideas which they offer for sale.

Needless to say, caution must be exercised in evaluating such proposals before any commitments are made.

The employees within a company should not be neglected as a source of ideas. With a little encouragement some with the proper background may yield worthwhile suggestions.

From fellowships maintained at colleges and universities may come information of value leading to new product ideas.

Screening Ideas

Next in importance to acquiring ideas is their evaluation, to classify them according to whether or not they deserve further study and if so, how much. All ideas should be carefully scrutinized before large sums of money are expended on their development, but this does not imply the adoption of a "hardboiled" attitude toward new product ideas. On the contrary, an objective study should be made of each idea with all factors of importance receiving consideration.

Most companies will have a group, often designated as the New Products Committee, entrusted with the responsibility of screening new product ideas and making recommendations regarding their disposition. This committee should be composed of at least a representative of top management, the research director and the sales, advertising and production managers. Legal and clinical representation are also very desirable, but where the size of the company does not permit this a patent attorney and one or more physicians qualified to present the clinical point of view should be retained on a consulting basis. They may attend meetings with the New Products Committee particularly after ideas have been carried part way along the screening process. Among the factors which should receive attention by the New Products Committee in its evaluation of new product ideas are the following:

(1) *Sales Factors:* Typical questions that logically arise in a discussion of sales factors are:

(a) What are the sales possibilities of the suggested product? Does the product contribute something new?

(b) Is the market worth cultivating?

(c) Will an educational campaign be necessary to insure ready acceptance of the product? How much will such a campaign cost?

(d) What sort of competition is the product likely to encounter immediately upon its introduction or later?

(e) Will sales fluctuate with the seasons?

(f) What will the price picture be?

(2) *Research Factors:* Here, too, typical questions help to indicate the points around which discussion might revolve in determining, from a research standpoint, whether an idea merits further investigation:

(a) What are the probable difficulties that research may have to overcome?

(b) About how much time will be necessary to complete the laboratory phases of the study?

(c) Are personnel with the proper qualifications available for carrying on whatever research the product may require?

(d) What is the best estimate that can be given of the probable cost for carrying out the research program?

Orienting experiments may be necessary before answers of any value at all can be given to the questions just raised. Even then the answers can not be accepted as final because the problems of research cannot always be foreseen.

(3) *Production Factors:* The manufacturing problems likely to arise should be given consideration early in the screening process for unless the facilities in plant, equipment, and personnel are available or procurable, research on the project may be largely wasted.

The probable cost of production should be taken into account too, for if costs are excessively high serious marketing problems may be encountered. However, it should be borne in mind that before research on a product is completed and a manufacturing process worked out, production cost estimates may be out of line.

(4) *Clinical Factors:* Obviously no pharmaceutical specialty should appear on the market without previous clinical evaluation. Hence the nature of any clinical studies that may be required should receive attention. Apart from this, however, the clinical point of view is desired during the screening process in order to help in reaching a conclusion as to whether the proposed new product will fill a real clinical need. The clinical viewpoint will also be found helpful in outlining the general characteristics the product should possess to fit its purpose best.

(5) *Legal Factors:* Before work is initiated on any new project the patent situation should be thoroughly explored. Preliminary surveys may be sufficient during the screening process to indicate whether existing patents will have to be circumvented and whether this is likely to complicate the research picture.

Preparation is the keynote of success in any committee deliberations. Offhand opinions based merely on superficial impressions are practically worthless as evidence to judge whether an idea for a new product merits adoption. The chairman of the New Products Committee should not only inform committee members beforehand regarding the subjects to be discussed but should assign certain members topics which they are well qualified to comment on in detail.

(*Continued on page 236*)

JOHN G. SEARLE

"Happy workers are efficient workers"

JOHN G. SEARLE is proof that the saying "from shirt sleeves to shirt sleeves in three generations" does not hold water. A better description to fit the Searle case would be "from shirt sleeves to coat tails in three generations."

In 1888 medicine and pharmaceutical products were considerably different from today—liquids of one type or another represented nearly the complete therapy. There were no pharmaceutical manufacturers west of Indianapolis and Detroit so G. D. Searle, a pharmacist and the owner of four retail stores joined with other competent men and established a manufacturing business in Omaha, Nebraska. It was soon apparent that this location was too far west and after one year the business was moved to Chicago.

Mr. Searle later withdrew from this particular company, but because of insistent demand from his many friends in the profession and trade created his own firm, G. D. Searle & Co. in Chicago in 1906.

As time went on naturally the number of Searle products increased. It was the custom at the dawn of the twentieth century for every doctor to have his own variation of commonly used drugs. Each had a special color for his aspirin or soda bicarbonate tablet and it didn't take long before patients identified their good results with the color of the tablet—i.e. "pink pills for pale people." While the special formulas and colors may have had their place in medical practice, they meant chiefly headaches and red ink for the pharmaceutical manufacturer.

In 1909 grandfather Searle became ill and Dr. C. H. Searle, his son, an able surgeon who graduated from the famed Rush Medical College, took over. He guided the company along until 1930 when his son John G. Searle became the General Manager and later President.

John was destined to be in the pharmaceutical business the day the family physician announced there was a new boy in the Searle household. A program of training was planned which was certain of making the third generation Searle, a well-trained, on-the-ball pharmaceutical executive.

After a normal boyhood of sling-shots, football, mumps, fishing and grade and high school, the future Searle head was ready for the University of Michigan College of Pharmacy. Young Jack did not confine his efforts to things academic, but took an active part in campus activities, played on the famous Michigan football team, but applied himself enough to his studies to manage to get through as "an average student."

In 1923 the elder Searle took his son into the business. He put him in charge of purchasing—about which the lad knew little or nothing. It didn't take the Michigan alumnus long, however, to learn that supplier salesmen are good friends to have—especially if you are new on the job. By careful study and with the patient guidance of friendly salesmen, John Searle learned how to purchase his supplies efficiently and economically.

Through the years the present boss of G. D. Searle had experience in purchasing, office management, was in charge of manufacturing laboratories, and finally operating head of the company.

As John Searle worked into the business he made a careful analysis of his company's line of products. Cost and profit studies were conducted, trends plotted and a course of action outlined. It was obvious that Searle could not hope to get competitive business from the larger houses. The way to success lay in investing real money in research which would lead to the development of specialties. The study made

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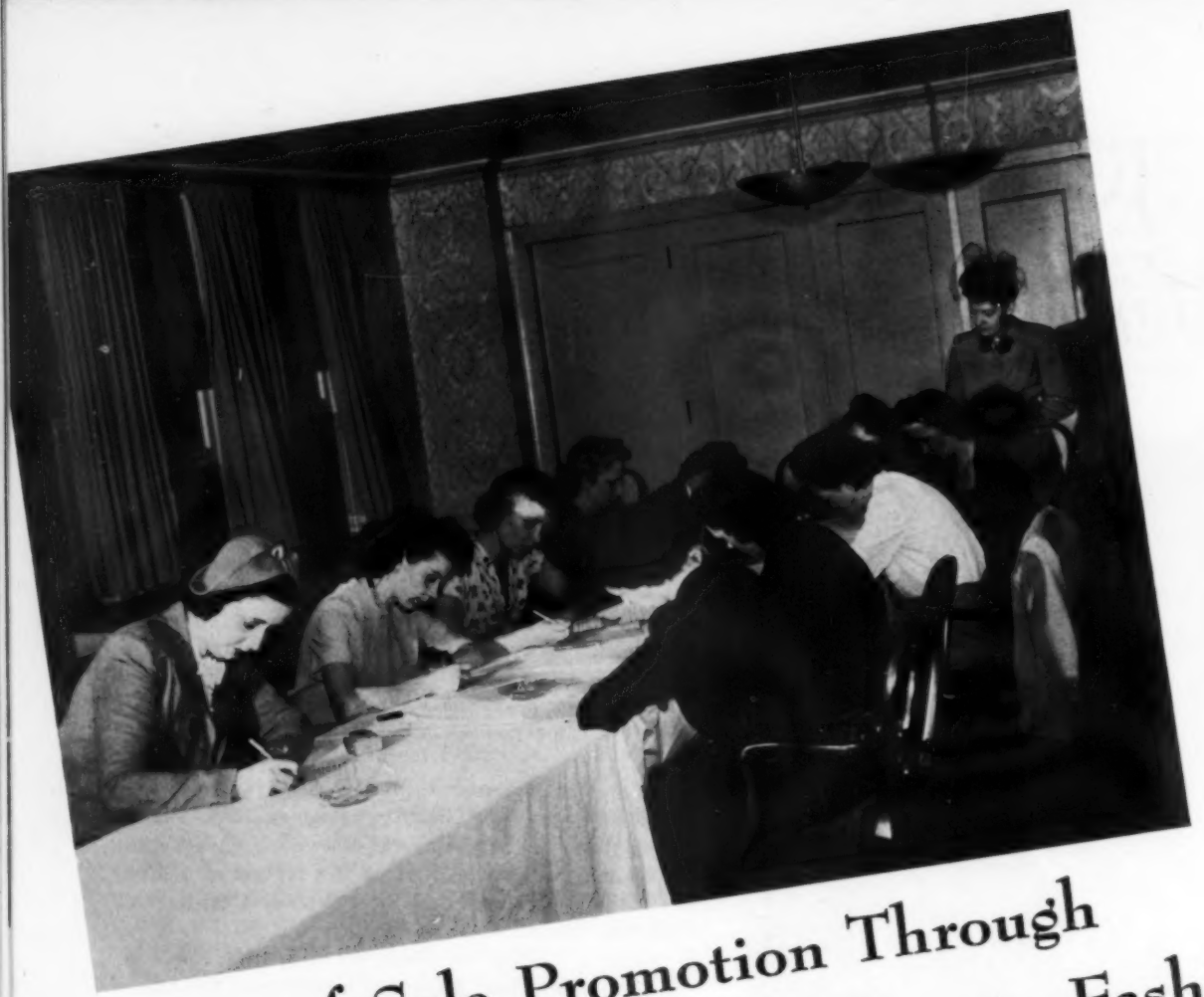
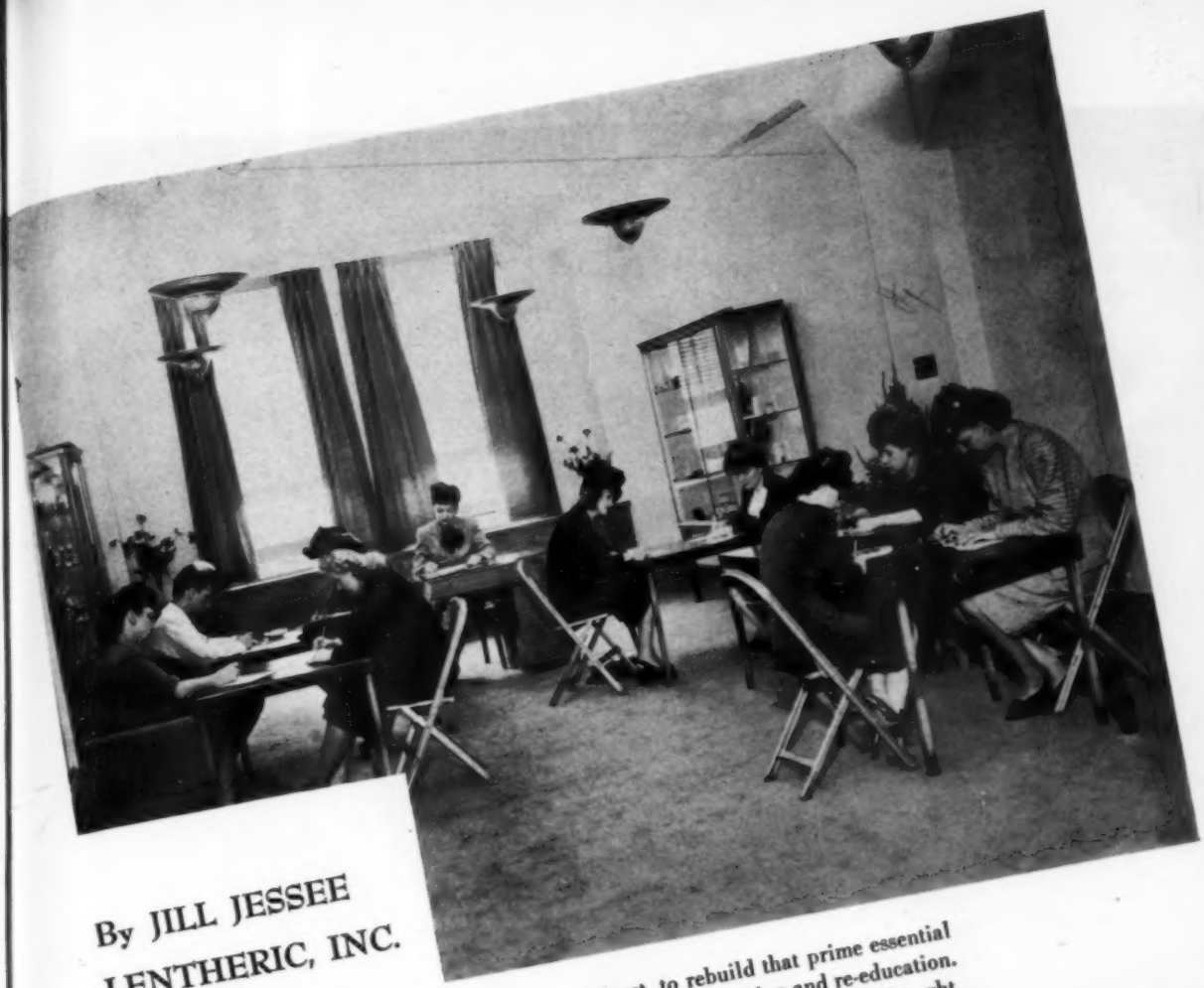


Point-of-Sale Promotion Through The Cosmetic School of Beauty Fashion

To Lentheric, The Cosmetic School of Beauty Fashion offering an eight weeks training course on perfumes and cosmetics, was a psychologically-timed idea that seemed a perfect answer to a pressing need. This course is available for subscription to manufacturers, wholesale drug chains, and department stores for the benefit of their cosmetic sales people and Lentheric was the first manufacturer to have the lessons mailed to its store representatives throughout the country. The reasons for such an instantaneous and enthusiastic approval of the idea were the following:

Sales personnel anemia induced by wartime conditions called for a strong vitamin injection. Like everyone else, we were distraught by personnel turnover of which at least a share might be preventable. Sales girls, relatively new to the cosmetic field, might conceivably react energetically if given a dynamic dosage of concentrated training. Upon the successful completion of a written examination at the close of the course of study, they would be presented with an impressive certificate issued by The Cosmetic School of Beauty Fashion which would give them a feeling of prestige and of being successfully launched on a definite career. Instead of drifting on to some other field of work, they would now feel that they were ready to go places, right where they were.

Sales girls who were long familiar to the cosmetic selling field had become inert. They no longer had the initiative and drive and exuberance of pre-war high-pressure selling. The lack of merchandise in sufficient quantities had sapped their selling vitality. The indifferent and lackadaisical sales people with whom they were surrounded were dragging them down to their level. These girls, too, needed a pep injection!



By JILL JESSEE
LENTHERIC, INC.

Here was a prescription which could help, at least, to rebuild that prime essential to healthy selling. In addition, both groups of girls needed education and re-education. Lentheric maintains a very thorough course of study of its own. On casual thought, the BEAUTY FASHION School might seem superfluous and an unnecessary expense. On the contrary. Our own training, like that of any manufacturer, is written from our own particular point of view and cannot, by its very nature, be impartial, complete, basic in all detail. Moreover, there is no compulsion behind its study. Although it is a part of our educational program to require a written examination, such an examination cannot be supervised and with frequent personnel changes and a lax let-down attitude in general, it had become more and more difficult to force this extra effort. The girls who had taken their examination some years ago were not likely to re-study their old manuals. Here was an opportunity to refresh them with brand-new material which would have a keener edge than the dog-eared manuals they had probably discarded long ago. And, in this instance, although taking the examination was not compulsory, it would be a matter of honor to do so—and, besides, it was to be conducted by an outside authority and there was that reward of a "qualified beauty consultant" certificate to urge them on.

Wartime conditions had made it difficult to hold as many and as large regional and national sales meetings as usual. Here was a means of bringing together store representatives in a number of different areas at examination time to meet with each other and to feel the surge of an esprit de corps difficult to inspire through correspondence or through infrequent meetings. We were able, in some instances, to arrange for these examinations to coincide with other dramatic Lentheric events. For instance, the groups who met in Chicago, San Francisco, and Los Angeles were privileged to attend the openings of the new Lentheric show rooms in these cities. On each of these occasions, W. D. Canaday, Vice President of the company, was present and held a business meeting for the benefit of the examinees as well as other store representatives and

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BLACK STAR

New developments in thiouracil hold out the promise of a new therapeutic approach to the treatment of thyroid diseases which may obviate the need for surgery or at least heighten the safety factor when an operation is necessary.

Chemotherapy of Thyroid Disease

By M. A. LESSER

SUBTOTAL thyroidectomy or partial removal of the thyroid gland is always a delicate operation and sometimes a hazardous one. With many cases of hyperthyroidism surgery has been the only recourse if the unpleasant and often dangerous symptoms of excess thyroid hormone production were to be controlled. During the last three years, however, evidence has been accumulating which points to the possibility that the use of certain chemical drugs may obviate the need for surgery in many cases or at least heighten the safety factor when an operation is necessary.

Hyperthyroidism or thyrotoxicosis occurs when overactivity of the thyroid gland results in the formation and release of excessive quantities of thyroxin. This increased secretion of thyroid hormone produces a train of quite typical symptoms such as increased metabolic rate, loss of weight, nervous irritability, tremor, sweating, and in some cases tachycardia, increased pulse rate and a characteristic fineness of the skin and hair. Considered to be a rather widely prevalent condition, in a number of cases of hyperthyroidism the symptoms are quite mild.[1] Conversely, as remarked by Jackson,[2] a large number of persons die each year from the effects of the disease, and many others are seriously incapacitated, some permanently.

When the symptoms of hyperthyroidism or thyrotoxicosis become sufficiently severe, the patient is hospitalized. While such measures as rest, iodine administration and the like are often helpful, in a large proportion of cases the attainment of the desired results has required surgical removal of part of the over-active gland. Operative treatment by subtotal thyroidectomy is generally successful but, as most surgeons admit,[3] does not cure the underlying disease. Moreover, two complications following operation—the development of hypothyroidism or recurrences—have been encountered so frequently as to be considered definite hazards.[4] Then too, one cannot overlook the fact that hyperthyroid patients with their high metabolic rates are often poor surgical risks.

From this it becomes evident why any drug that might remove the need for surgery or considerably lessen surgical dangers would attract medical interest. Up to a few years ago, however, no suitable drug had been discovered so that physicians were obliged to concentrate on surgical procedures. Of course, iodine has long been employed in treating hyperthyroidism. Quite helpful in some instances and affording partial relief in others, many patients have become resistant to the action of this substance. Adopted as a routine agent in the preoperative preparation of patients, the administration of iodine has usually resulted in sufficient reduction of toxicity to permit thyroidectomy with relative safety.[5] However, as pointed out by Bartels,[6] in spite of the proper use of iodine, there still remained a group of cases in which there was serious surgical risk. Therefore, the need persisted for a substance that would provide preoperative improvement beyond that obtained by iodine and other supportive measures. Others had also commented on the shortcomings of iodine and had voiced the need for a drug with stronger antithyroid action.

It may be said that the era of chemotherapy for thyrotoxicosis began in 1941. During that year, while working on an unrelated problem, the Mackenzies and McCollum[7] noted that the prolonged administration of sulfaguanidine produced hyperplasia and enlargement of the thyroid gland of rats. Independently, and at about the same time, Richter and Clisby[8] and Kennedy[9] reported similar effects following the administration of thiourea and related compounds. After a comprehensive investigation of over a hundred compounds related to sulfaguanidine or thiourea, Astwood and his associates[10, 11] were able to report that sulfadiazine was the most potent of the sulfonamides studied, that compounds related to thiourea were more active than the sulfa drugs and that thiouracil appeared to be the most effective of the thiourea derivatives.

As a result of his experimental findings, Astwood[12] decided to test the efficacy of thiourea and thiouracil on patients with hyperthyroidism. Administration of these drugs, he reported, produced relief of symptoms and a return to normal of the basal metabolic rate. Shortly thereafter Williams and Bissell[13] confirmed these observations. They reported that nine patients with thyrotoxicosis were treated with thiouracil and were relieved of toxic manifestations. The basal metabolic rate and blood iodine levels returned to normal in two to six weeks. Although the course of one of Astwood's patients had been complicated by the development of agranulocytosis, no serious complications were encountered in any of the cases treated by Williams and Bissell.

In the period since these initial studies, both thiourea and thiouracil have been widely employed for experimental therapeutic use and a large mass of data based on experience with many hundreds of cases has been accumulated.[14] Although thiourea has proved effective and reports on its striking action have been published in detail,[12, 15, 16] its use has been limited because of such disadvantages as a nauseating taste, a tendency to cause nausea and vomiting and by the fact that it imparts a peculiar sweet odor to the breath. In addition, it causes various reactions of a toxic nature.[17, 18] Thiouracil, which acts in a manner similar to thiourea, does not cause unpleasant breath, produces less gastrointestinal disturbance, and is less toxic.[1, 19, 20]

Today, pending the discovery of an agent with equal or better therapeutic action and a wider margin of safety, thiouracil has become the drug of choice in clinics where thyrotoxicosis is treated. As recently remarked by Bissell,[21] the efficiency of thiouracil in controlling the symptoms of hyperthyroidism has been abundantly confirmed. The effect of this drug seems preferable to that of iodine in that its action is both sustained and progressive. Thiouracil, he notes, has

been used successfully not only as a preoperative agent but also as an entirely medical therapy for thyrotoxicosis. It has been successful in controlling cases in which iodine failed to alleviate symptoms. However, despite these successes, thiouracil has proved to be a somewhat toxic agent that necessitates discretion in its employment.

Chemically speaking, thiouracil (2-thiouracil) is a heterocyclic derivative of thiourea, which in turn is the sulfur analogue of urea. Thiouracil is a white crystalline powder which is readily soluble in alkaline solutions, slightly soluble in water (1:2,000) and insoluble in ether, ethyl alcohol and acids. It is a relatively stable compound either as a solution or as a powder. It has no odor but does have a bitter taste.

Although thiouracil was first prepared by Wheeler and Bristol[22] in 1905, it was not investigated pharmacologically until its potentialities as an antithyroid drug were suspected. Since then considerable data concerning its pharmacology has been accumulated,[23] Much of this information has been concisely summarized by Baker[1] and by Chen.[19] About one-third of ingested thiouracil is excreted in the urine unchanged, while the remainder is destroyed in the gastrointestinal tract and by other body tissues. None of the drug is detected in the feces. It seems that the major portion of thiouracil absorption probably occurs in the stomach and duodenum, because appreciable quantities of the drug appear rapidly in the blood. Distributed throughout most of the body fluids and tissues, a greater concentration of thiouracil has been found in the bone marrow, thyroid, ovaries and pituitary than in other tissues.

The exact mechanism by which thiouracil produces its effects has not been fully elucidated. The data available at present suggest that thiouracil inhibits the synthesis of the thyroid hormone and that under the influence of the drug the iodine content of the thyroid gland is rapidly depleted. The resulting thyroid insufficiency stimulates the anterior pituitary gland to produce a compensatory but ineffectual hyperplasia of the secretory cells of the thyroid. Clinically this is evidenced by a lowering of the basal metabolic rate and a concurrent increase in the size and vascularity of the thyroid gland.[24]

As summarized by Barr,[14] animal experiments have made it apparent that thiouracil and related compounds impede the deposition of iodine and the formation of thyroxin in the thyroid gland; the hyperplasia of the gland being a response to the lack of thyroid. Of importance in this connection is the observation[25] that the inhibitory action of thiouracil may be nullified by the administration of thyroid extract or thyroxin. Iodine not only has no effect, but actually delays the drop in basal metabolic rate. In fact, iodine appears to by-pass the thyroid gland in the presence of thiouracil.

Improvement after the administration of thiouracil is indeed striking in most cases. Jackson[2] estimates that approximately 83 per cent of the patients receiving the drug are benefited. As already indicated, one of the most important effects is a reduction in the metabolic rate. Indeed, the metabolic level is probably the best single criterion for judging improvement. In most, but not all cases of hyperthyroidism, the basal metabolic rate is slowly reduced to normal. In this respect thiouracil is much more effective than iodine. Iodine usually produces an initial drop in the basal metabolic rate, followed by a leveling off at a rate generally still somewhat higher than normal. In contrast, the continued use of thiouracil effects a continuous drop to a normal or even subnormal level.[24] According to Baker,[1] the speed of remission is much greater with iodine, but the situation is controlled only temporarily. In the case of thiouracil, however, the metabolism is controlled as long as the drug is administered.

Fishberg and Vorzimer[26] feel that, barring toxicity, the results obtained point to thiouracil therapy as an ideal method for securing reduction in basal metabolic rate with a minimum of effort. It entails no interruption of the patient's normal occupation nor prolonged periods of rest, and often avoids the necessity for operation.

Another striking effect of thiouracil therapy is the correction of emaciation in nearly all cases. Usually there is a marked gain in weight after the first few days of intensive therapy. From animal studies it was feared that the beneficial action of the drug might be accompanied by noticeable enlargement of the thyroid gland. However, when the dosage of the drug is limited to the quantity required to establish a normal metabolic rate, the increase in size is usually not measurable and is seldom sufficient to cause inconvenience.[14]

Protrusion of the eyeballs, or exophthalmos, a frequent sign of hyperthyroidism, is considered to be but little benefited by thiouracil. McGavack and his associates,[27] however, reported that exopthalmos was decreased under treatment in 17 out of 38 patients with this symptom. So-called "lid-log" is diminished with thiouracil treatment and is abolished in most cases, so that there is an appearance of marked improvement.[14]

The characteristic fine tremor is often promptly diminished and in most instances is entirely abolished. Excessive activity (hyperkinesis) disappears. Such common symptoms as "nervousness" and apprehension are among the first to vanish. There is also a favorable response in the pulse rate and, in many patients, a decrease in tachycardia and a fall in systolic pressure parallels the dimunition in the basal metabolic rate.

It appears, therefore, that thiouracil favorably affects most of the functions which are disturbed in thyrotoxicosis. However, the rate of response varies quite considerably and the factors influencing this rate are not fully understood. Often the response is most

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DEFENDING BRAND NAMES

THAT this industry has much to defend in the way of brand names is recognized by everyone. The Brand Names Research Foundation, Inc., an organization for the defense of brand names in this country, recently awarded "Certificates of Public Service" to owners of 200 brand names which have been in existence for fifty or more years. The accompanying list gives the trade-marks in this industry for which certificates were awarded. The awards were made at a dinner at the Waldorf-Astoria attended by 1,250 people.

U. S. Senator Albert W. Hawks, of New Jersey, addressing the gathering, stated that "organized factions" aim to upset the American system of distribution, "of which the brand name system is the keystone", and thus create "an economic revolution." "At the present moment," he said, "there are factions in this nation which would destroy the great American system of business. They have stated so for publication. One of the targets they have chosen for attack is the brand name system as it is used in the distribution of goods and services in our economy. It has been chosen for attack for an obvious reason. The brand name system is the keystone of distribution, and distribution is the arch which supports our whole economy.

"At home we see social unrest blazoned in the daily newspapers' headlines. We stand uneasily on a powder chest. Let distribution fail, let factories and fields lie fallow from failure of distribution, and what has happened elsewhere can happen here as the fatal aftermath of the war our strength has won."

Alfred C. Buckingham, vice-president of Cluett, Peabody & Co., the new chairman of the Foundation, called upon "every manufacturer and advertiser of a branded product to join in a program to convince the people of America that their own best welfare lies in support of the system of brand name identification." Mr. Buckingham asserted that an attack on this system is "an attack on freedom itself."

Drug and Cosmetic Brand Names in Existence 50 or More Years

Name	*Year*	*Owner*
Williams	1840	J. B. Williams Co.
Cashmere Bouquet	1866	Colgate-Palmolive-Peet
Dr. Lyon's	1866	Sterling Drug
Johnson's Foot Soap	1870	Thomas Gill Soap Co.
Phillips'	1872	Sterling Drug
Colgate Dental Cream	1873	Colgate-Palmolive-Peet
Scott's Emulsion	1873	Scott & Bowne
Hinds Honey and Almond Cream	1876	Lehn & Fink Products Corp.
Smith Brothers Cough Drops	1882	Smith Brothers
Vitalis	1883	Bristol-Myers
Mum	1888	Bristol-Myers
Colgate Shaving Cream	1888	Colgate-Palmolive-Peet
Lilac Vegetal	1889	Pinaud
Lysol	1890	Lehn & Fink Products
Ingram's	1891	Bristol-Myers
Richard Hudnut	1895	Richard Hudnut
McKesson & Robbins	1841	McKesson & Robbins
Eau de Quinine	1858	Pinaud
Vaseline	1870	Chesebrough Mfg. Co.
Albolene	1890	McKesson & Robbins
Merck	1891	Merck & Co.
Calox	1893	McKesson & Robbins
Fletcher's Castoria	1878	Sterling Drug
Vapo Cresolene	1879	Vapo Cresolene Co.
Squibb	1858	E. R. Squibb & Sons
Vicks	1894	Vick Chemical Co.
Cow Brand	1876	Church & Dwight
Arm & Hammer Brand	1873	Church & Dwight
J. B. L. Cascade	1894	Tyrrell's Hygienic Inst.

Representing the firms in this industry as recipients of the awards were: Charles Campbell, vice-president J. B. Williams Co.; Robert E. Healy, Advertising manager, Colgate-Palmolive-Peet; D. L. Williams, O.W. Ergenzinger, J. D. Bohan, vice-presidents Sterling Drug; Russell Provost, Thomas Gill Soap Co.; Dr. J. S. Scheuer, research director Scott & Bowne; F. Moeller, export manager, Lehn & Fink; W. W. Smith, president Smith Brothers; R. B. Brown, assistant vice-president Bristol-Myers; Marcel Michelin, vice-president Pinaud; G. A. Pfeiffer, Richard Hudnut; L. M. Van Riper, Vice-president McKesson & Robbins; B. L. Emery, secretary Chesebrough Manufacturing Co.; George W. Merck, president Merck & Co.; Albion L. Page, president Vapo Cresolene; Lauren H. Ashe, advertising manager E. R. Squibb & Sons; William Y. Preyer, president Vick Chemical Co.; Patrick F. Curran, manager advertising department Church & Dwight Co.; S. L. Palmer, president Tyrell's Hygienic Institute.

Of the 200 awards made at the dinner, 115 companies receiving the awards are located in the New York area. At three previous dinners, awards were made to 41 brand names in Chicago, 15 in Cincinnati, and 32 in Philadelphia. This brings the total of "Golden Anniversary" brand names so honored to 288. Of these brand names, 31 are at least 100 years old.

COURTESY COTY, INC.

Employment thru Cosmetics*

A CONGRESSMAN from the politically important state of Texas was reviewing a revenue bill. His mind was chiefly intent on the possible effect of this particular bill on employment. The figures of the United States Census of Manufacture of 1942, the latest figures, were on his desk.

Among many industries, cosmetic manufacture had been discussed. The congressman, picking up the Census report turned first to his own State. In 1942 Texas had 14 establishments employing 35 salaried workers, 100 wage earners. Interested, he turned to the total for the United States. In 1942 there were 2,905 salaried workers, 10,158 wage earners, a total of 12,013 employes. Could he afford to show further concern over any possible effect on unemployment in an industry this size, whose retail sales for the current year ending June reached the enormous total of $772,775,000, in view of the larger aspects of this revenue bill and the vital need for detailed study of many large industries. The Congressman thought not.

It is not the purpose of this discussion to point out that Census figures do not tell the full story for any single industry, and omit large sections which cannot be classified as manufacturing. Many cosmetics are made by companies, pharmaceutical companies, for instance, where the

*By Peter Vautin

(*Continued on page 296*)

Packaging and Selling

Cosmetic Statistics

We've held forth on this subject before and at length so we won't bore you with a repetition of our gripe that there is a great need for accurate statistics in this business and that as one of the two or three sources of reasonably accurate information we come in for a lot of abuse from "survey" artists who charge the client 4 to 40 thousand dollars and expect us to stand and deliver the material for free. And they aren't even decently polite about it. We're getting tired of throwing them out of the office or hanging up on them and we'll welcome the day when the Census Bureau or somebody goes to work again to collect and publish cosmetic statistics.

In the meantime, we publish for the first time in any publication, some of the figures collected by the WPB on the cosmetic business in 1941. These are now considered history and can be released.

Total production of cleansing creams in 1941 was 58,879,122 marketable units, of which 57,359,368 units were sold during that year. Six companies manufactured 64 per cent of the total.

Over 81 million lipsticks were produced during that year of which 77,592,724 were sold. Fourteen companies each sold over 1,000,000 units.

Over 113 million units of nail enamel were manufactured of which 108,152,597 were sold. Three manufacturers produced 84 per cent of the enamel sold.

The dentifrice story, as of 1941, was over 219 million tubes of paste, over 63 million cans of powder, and over 12 million bottles of liquid dentifrice.

And during 1941, compact rouge outsold cream rouge by 32 to 1, with 32,523,880 units of the former marketed, as against 1,675,595 units of the latter.

Cosmetic Estrogen Creams

The clearest statement we have yet seen on the evaluation of the cosmetic effect, as distinct from the systemic effect, of the estrogenic creams is attributed to a chemist and dermatologist who has done some of the most important work in this field for one of the top manufacturers.

He says that, "Their topical application to skin definitely affects two distinct changes. It increases the size of the capillary bed and it hydrates the collagen bundles. The effects of hydration in the true skin tends to stretch the epidermis of the skin and thus mechanically obliterate lines and wrinkles. The increase of blood to the skin resulting from dilating the capillaries can be calculated to supply greater ozygenation to the skin, the effects of which can only be considered beneficially."

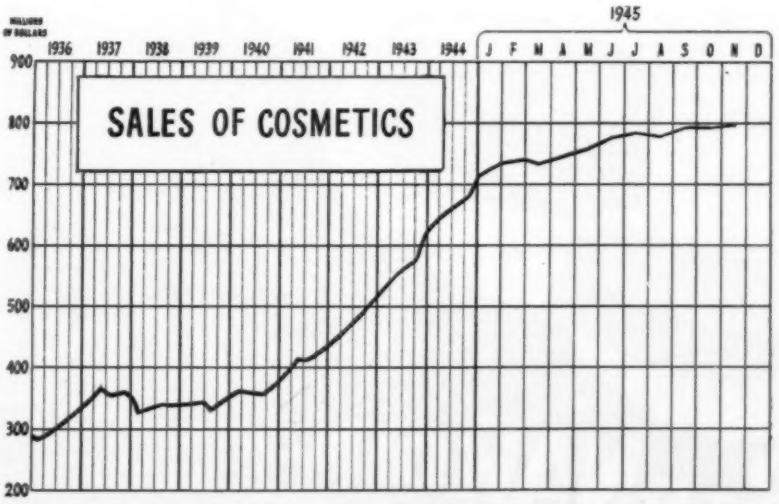
Speaking of cosmetic hormone creams, the purchase of De Kama by Eugene Coleman, Jr., and his associates reminds us that the De Kama line was built around Creme Hormonique which, according to the announcement, "introduced to the cosmetic field the first hormone cream."

Importance of the Dealer

We reprint below portions of a piece on merchandising Pepsodent. We reprint it chiefly because it emphasizes again and again that "the force of advertising without dealer cooperation is not sufficient to increase sales." Too many big companies get the idea that the dealer is unimportant, and that a heavy enough advertising sandbag will crash through any amount of dealer indifference or antagonism.

The story starts by saying that Pepsodent first appeared in 1915 and by 1919 was doing a gross annual business of $100,000. In the latter year, Albert Lasker, then head of Lord & Thomas, invested $300,000 in the business, accepting a minority stockholder's interest. The account continues:

"Before the stock market crash of 1929 Pepsodent was feeling a decline in sales. Hoping to bolster declining sales Amos and Andy went on the air for them in August, 1929 and stayed on the air under this sponsorship until 1937. The company felt that it could overcome point of sale resistance by greater advertising. This firm was referred to by many in the industry at that time as an outstanding example of a manufacturer who attempted to force his product to the consumer with no regard for the retailer's rights to a profit.



Retail sales of cosmetics for the twelve months ended with November 1945 totaled $794,241,000. This compares with $792,700,000 for the twelve months ended with October 1945, and with $682,270,000 for the twelve months ended with November 1944.

A CLOSURE IS KNOWN BY THE COMPANY IT KEEPS
Foods
Paints
Cosmetics
Wines and Whiskies
Bleaches
Pharmaceuticals
It is no accident that so many famous packers of well known products consistently use our closures. For these closures not only improve the speed of production lines, but, also, they please consumers of these products by yielding easily for removal.
We are very familiar with most all closure problems and both our equipment and experience are available to you.
Why not let us be hosts to both you and your problems, while we discuss Bernardin service and facilities as applied to your needs.
BERNARDIN BOTTLE CAP CO., INC.
EVANSVILLE, INDIANA
BERNARDIN Since 1881
America's First Manufacturer of Metal Closures

Packaging Forum

By Josephine von Miklos

A recent opportunity to re-design a very fine pharmaceutical cosmetic line has given food for ideas not usually encountered in the course of designing the regular type of cosmetics. The problem was to take a good and solidly established line which lacked nothing except eye appeal and put it into a dress which would make the user want to keep it the way decorative things are kept. A sound thought to begin with, for this department has long raised a loud if not-much-heeded voice that even a tin of aspirin COULD be something that would not aggravate the headache for which its contents are used. The clients, for once, did not specify color, decoration, typography, nor did they insist that, while the line should be completely re-designed, it must look exactly like the old one. This was a job into which one could really bite deeply, and one did.

Well, first of all, how *should* a pharmaceutical cosmetic line look? It shouldn't look like fluff, for once. Daisies, forget-me-nots and wreaths were out. Out too were bows and hearts. And last, but not least, out was pink. But the line must look elegant and dignified and if a touch of feminine lightness and charm could be added it would be all to the good. The color must blend with other colors in a bath or dressing room, and with all that, it must be distinctive enough to make the customer who uses the cosmetics proud to use it, and not, since there is a pharmaceutical angle to the line, self-conscious.

Still, the non-fluff side of the business had to be stressed. And so, the final solution to the problem was really rather simple: a beautiful neutral color which would blend with every other color; extremely tailored decoration with great emphasis on white and completely classic typography. A touch of gold... a very tiny touch... to lend elegance and a feeling of warmth to the coolness of the rest of the decoration. Does sound simple, doesn't it? It was. It only took two months to arrive at it, and the clients have never seen the dozens of dummies which have long since perished in the pyre which is always lit when there are dozens of dummies to be discarded.

So far the clients are pleased. And the point to this story is this: if a client has the courage to say "elegance means simplicity" and stick to it, he or she is bound to arrive at a happy solution. Too, if a client has the courage to say to a designer "you do as you think best, and we are prepared to like what you do", and the client's production and advertising and sales and merchandising departments feel the same way, and keep their fingers out of the pie, even though they may cross them during the period of the birth of a new line. the chances are pretty good that the final result will be all right. Of course, and this should probably have been said at the beginning: more power to the owners of a pharmaceutical cosmetic line who feel pharmaceuticals don't necessarily mean design horrors and cosmetics not by hook or crook, cherubs on a background of roses. But in one way or another, we have said that before.

More and more discounts were offered, more and more money was spent in advertising, particularly by way of the radio program.

"From 1924 through 1928, the five years prior to Amos and Andy, Pepsodent annually spent an average of $1,650,187 for advertising. That money was well spent, as is evidenced by the number of people who demanded Pepsodent paste during those years. Taking this five year average as a base we find in 1929 they increased this expenditure by approximately 9%, in 1930 by 15%, 1931 by 94%, in 1932 by 43%, in 1933 by 63%, in 1934 by an unknown percent, in 1935 by 13%, in 1936 by 24%, in 1937 by 44%. In 1938 and in subsequent years they spent less money advertising than they did on the average for the five years preceding 1938.

"Now let us look at the merchandising picture during those years. *Amos and Andy did not stop the tide of decreasing sales.* As a matter of fact, sales continued to decline until and into 1935.

"In other words, the force of advertising without dealer cooperation was not sufficient to increase sales, and this during a period when the heaviest expenditures were being made for Amos and Andy. Radio, nor any other form of advertising, had been able to overcome the handicap placed on the product by lack of retailer cooperation.

This account concludes by stating that Pepsodent's net profits in 1943 were about three million dollars, a year during which 63,000,000 units of merchandise were shipped. Sales in 1944 were about 11 per cent ahead of 1943 and at least one survey indicates that for the first time Pepsodent is best seller in the toothpaste field.

French vs American Again.

The latest development in the "are American perfumes better than French perfumes" argument is furnished by a piece from a French newspaper which reads as follows:

"A thousand G.I.'s had been invited to a showing of French perfumes by the Chamber of Commerce in Paris. As an American Colonel asked if a perfume produced in the United States with the same ingredients would be as good as those produced in France, a French manufacturer answered thus, 'You have noticed that there is always a little air between the perfume and the stopper. Well, what will always give the edge to the French perfume is perhaps that little quantity of air from Paris inside the bottle'."

Our correspondent closes by remarking that, "I suppose that now some people will start importing air."

Double Duty Cosmetics

A friend of ours has pointed out that many cosmetics are labeled for a double duty use but that the secondary use is played down and presented as an afterthought in small type at the bottom of the label. She feels that these secondary uses should be played up. Our own position is that the manufacturer should decide where his interest lies and then either sell a specific product for a specific use and take out that line of type, or else make much of the dual use in advertising and promotion. This undecided manner of claiming a secondary use is poor merchandising. Either forget it or do it right. Anyhow, here is what she says:

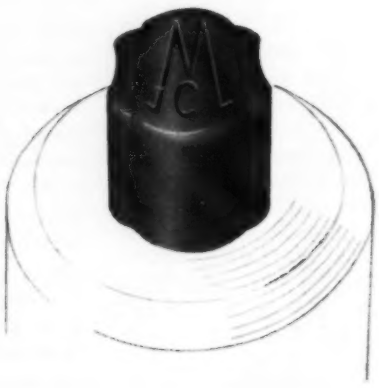
"I went into a label reading huddle the other day and came up wonder-

PERSONALIZED DESIGN POSSIBILITIES FOR YOUR PRIVATE MOLD CAPS

INTAGLIO MONOGRAM, set in decorative frame of your own choice, is one of many Artmold design possibilities that add distinguishing new beauty to your package.

YOUR DECORATIVE motif, or trade-mark, with your brand name depressed and filled in with eye-catching color, gives your package sales-building individuality.

GRACEFUL raised design topped by your monogram makes package look taller, gives that touch of extra style and distinction that builds customer recognition.



FINGER-GRIP cap shape is only one of many individualized design possibilities available in Artmold Caps to lend glamour to your "luxury trade" packages.

ARMSTRONG'S *Artmold* PLASTIC **CAPS**

YOUR PACKAGES NEED every bit of extra style and distinction you can give them if they're going to compete successfully in today's markets. Give them a head start with Armstrong's Artmold Caps. For free design suggestions, send a sample or drawing of your package to Armstrong Cork Company, Glass and Closure Div., 3802 Prince Street, Lancaster, Pennsylvania.

The Cosmetic Trend

Floor managers and general merchandising executives of department stores are getting conscious of the fact that something must soon be done about the space requirements of their toilet goods sections. Their growth has not been a special problem through the war years, when floor space was available. It becomes one now, as the durable departments start to expand. Several suggestions are considered to relieve the resulting congestion. None contemplates cutting down on volume. All, however, threaten to "take it out of the hide" of the toilet goods manufacturer in one manner or another.

The first move, will doubtless, be to reduce the number of "irregulars" that were introduced during the war because of shortages of some lines and to concentrate heavily on the quick turnover, advertised, fast traffic lines. Manufacturers will be asked to reduce the size of their protective packaging. Display cards and other counter materials may be held to a minimum. Less stock will be carried upon and behind the counters, even of good sellers. Displays will feature the sizes most in demand and cut down on size varieties.

Manufacturers who expect that crowding will work against them in the long run will find it a good plan to consider, how to meet the resulting impairment of their sales prospects. Maybe they will simplify their lines. (One well-known line has over 700 items in it.) They may want to create an active demand for the slower selling specialties, design less bulky packages and counter helps when necessary, improve shipping facilities and do a number of other things that will compel buyers to take notice. Or they may want to shift to new outlets.

They may also want to hang on, as well as they can; because, the present congestion of counters (while highly inconvenient to all, including the customers of the store) is temporary only. The stores that feel it most are planning expansion and will do so as soon as the necessary building materials etc. become available.

It all amounts, of course, to the evident fact that a lustily growing industry, as are cosmetics and toilet goods, can not hope to expand indefinitely without hitting ultimately a spot where its distribution facilities are insufficient for the traffic. Toilet goods manufacturers must take notice of that fact. It has been a race, so far, between a growing output and stationary retail outlets. Industry can reduce the presure upon retail stores by intelligently planned sales management. There is certainly every reason for opening new outlets. Otherwise that promised billion dollar market for cosmetics may be delayed by the inadequacy of its flow from the producer to the consumer.

ing why so many cosmetic manufacturers hid their light under a bushel—or under a line of fine type.

"One texture lotion, for example, was described as useful for enhancing the natural beauty of the skin. For dry, combination or oily skin. Aids in removing clogging dirt, and so refreshes and brightens skin. Apply with patting to stimulate locally, and thus to help give color and clarity. An ideal cleansing treatment for skin with pores made conspicuous by grime.

"Then a paragraph on its application, and a final line: Makes a pleasant after-shaving lotion.

"That was the line that caught my eye. If the manufacturer had advanced the lotion as a 'double duty' special—texture lotion for 'HER' and after-shaving lotion for 'HIM' and body rub for both of them, many more half-dozen bottle sales might have replaced the single customary purchases.

"The same is true of other cosmetic items. The final line on a hand cream gives out the information that it may be applied lightly for a powder base—and what is more, applied lightly, it makes an excellent base. But the purchaser must read down to the last line to learn that information.

"The same use is ascribed to a creamy perfumed hand lotion—it makes a good powder base if applied lightly—and when the powder is put on while the cream is still moist, it clings for an amazingly long time.

"Even a before-you-ski cream has its last line of descriptive matter reading, 'greaseless, non-sticky, an excellent powder base.' What is more, this same cream is just as efficient as a summer sun-screening cream, altho it has never been marketed as other than a before-you-ski cream. Its running mate, after-you-ski cream, is described as a 'soothing, softening emollient'—and its final line reads: 'May be used as a night cream.' It actually is a rich lubricating cream—and excellent for chapped hands, which are the bane of a great many non-skiers who never in the world would buy a before and after you ski cream set, nor read the descriptive matter on it and learn how really triply useful it is.

"For that is so! Some cosmetics, advertised or advanced for a single purpose, do double duty and triple duty. Studying the labels in the leisure of your own home, you learn that—but how many shoppers, intent on finding 108 inch percale sheets and some hard candy for Aunt Martha, have time to pause at the cosmetic counter and read all the fine print on all the labels, trying to fine a multiple-use cream?

"True, some creams are advanced as all-purpose and multiple use—and they are bought for that reason. Clever merchandising might do a 'FOR HIM—FOR HER—FOR BOTH OF YOU' job. Those items exclusively for men might be grouped in one section; those exclusively for women in another (such as the cream masques, the rich night creams that are for softening the skin alone, and the many other specific-purpose products). And then those items which both can use—such as the texture lotion and after shave lotion, the hand cream and powder base, the skin creamy lotion and powder base, the sun cream and powder base, the after-skiing emollient which is both a night cream and chapped skin cream—these could be highlighted as useful for BOTH OF YOU.

"From the feminine viewpoint, to have a double-duty product, and never mentioning it as such, seems like overlooking too good a bet."

Gold Packages

Courtley has announced a new line of products called Courtley "Gold," packaged in gleaming gold flacons. Courtley has always used porcelain flacons, characterized by the double horse-head stoppers. For the new line, these porcelain containers are said to be fired in 23-carat gold. Courtley "Gold" includes after-shave lotion, colonge, suntanned men's powder, and shaving

From "Easterlings" to Sterling £

In the 12th Century, during the reign of Richard I, a small band of traders used to cross the rough and stormy channel from Europe's mainland to Britain. They came from the eastern part of Germany; hence were called "Easterlings". They exchanged large silver "tokens" (or coins) for the goods they wanted. These silver tokens became noted for their purity and uniform high standard—925 parts of pure silver to each 1000 parts—and were soon adopted by the English as a regular medium of exchange in commerce.

Such was the earliest origin of the English pound sterling. Through the years the "Easterlings' tokens" were contracted into the name "Sterling". . .the word that represents the highest standard of excellence in silver today.

In the field of glass containers, the name Carr-Lowrey has similar significance. It has become a hall mark for buyers who recognize and appreciate quality in commercial glass.

CARR-LOWREY GLASS CO.

Factory and Main Office: BALTIMORE, MD. • *New York Office:* 500 Fifth Ave. • *Chicago Office:* 1502 Merchandise Mart

Parfums Anjou has introduced Devastating Eau de Parfum, a lighter version of Devastating perfume, in a bottle that carries out the diamond design of the perfume bottle.

Leigh Perfumers presents its first post-war packaging with the Leigh perfume miniatures, consisting of four 1/3 dram bottles, to serve as introduction to a perfume wardrobe.

Flexible packaging sponsored by the Flexible Packaging Institute helps provide protection for cosmetic products such as bubble bath preparations, sachet, etc.

soap in a bowl. A new fragrance has been developed for this line which is masculine in a clear, stimulating fashion.

Perfumes in Miniature

Leigh Perfumes, a division of Shulton, Inc., presents its first post-war packaging with the Leigh perfume miniature. The miniatures consist of four one-third fluid dram bottles of the Leigh perfumes—Risque, Heartbeat, Dulcinea, Poetic Dream. They are packaged in a pocket-size white container with cerise and gold background window arrangement for the miniatures. It serves as an introduction for women to a perfume wardrobe. The box itself may be used after the contents have been removed for hairpins, bobby-pins or small knick-knacks.

Girl-Pink and Boy-Blue

Something interesting in the merchandising of baby boxes has been introduced by The Mennen Co.. The twin $1.00 Mennen Baby Boxes come in two different cover designs. One box has a pink background cover, featuring a full-color photograph of a blue-eyed, blonde baby girl. The twin box has a baby-blue background, upon which is a different full-color photo of a chubby baby boy.

Flexible Packaging.

"The Flexible Packaging Institute would have you know that fabricators of flexible packaging, through their ability to use singly *or in combination* an extensive range of papers, films, foils, laminants and adhesives, have provided the high degree of protection necessary for many drug products. "Frequently the most important requirement of a drug package is that it is moistureproof. Foil containers are outstanding in this respect. When coated or laminated with plastics, they are completely impervious to moisture transmission, and resistance to cracking and tearing is increased."

Samples of Anacin go out to the medical and dental professions in small bleached kraft flexible containers with pasted closure. Sample tablets of Phillips Milk of Magnesia are housed in small glassine envelopes with pasted closures.

"Flexible containers maintain brand recognition for cosmetics as well as for drugs and pharmaceuticals. Sample containers for powder illustrated here retain the original design of the larger consumer packages."

Innuendo is Roger & Gallet's new perfume presentation, packaged so that no two Innuendo packages will be alike since the covering for each will be cut from a different section of the paper.

Mennen's baby boxes come in two cover designs—one with a pink background cover featuring a baby girl, and the other a baby-blue background showing a baby boy.

Samples of Anacin go out to the medical and dental professions in small flexible containers. Sample tablets of Phillips Milk of Magnesia come in small glassine envelopes with pasted closures.

The Primrose House nail polish and lipstick combination is called Spring-Up, and carries out the idea with the "spring-up" stems of the multi-colored flowers which adorn the package.

Dorothy Gray has created Flamingo, a coral red, to go with tanned skin, and Flamingo and Suntan, as companions for sunshine, are packaged in an amusing book package.

G. Barr & Co. has added Balm Barr Lanolin-Creme shampoo as a sales-mate to its Balm Barr Creme-Whipped Hand Lotion, available in four popular sizes

True Color Reproduction

Kodachrome full-color photographs are used probably for the first time as the dominant design theme on Modart Fluff Shampoo cartons put out by La Maur Products, Inc., Minneapolis. Fresh gardenias, apple blossoms and natural pine boughs were used to gain true color reproduction in these striking kodachrome cartons, in an effort to impress customers vividly with the three shampoo fragrances—gardenia, apple blossom and pine. Modart Fluff Shampoo, by the way, is another newcomer to the cream-type shampoo market.

Color Promotions

Revlon strikes out early in 1946 with two new color promotions, Tortoise Shell", a russet red that is a departure from the reds and the pinks, and Hildegarde Rose, a pink-gold-rose for midseason's pale fashions. The quality of Tortoise Shell has been translated into simulated tortoise-shell packages, with touches of gold-leaf. Hildegarde Rose, inspired by the famous Hildegarde of supper clubs and radio, comes in an attractive package, carrying Hildegarde's own color signature of a rose in a gloved hand. Neither shade is designed to supplant classic reds, but rather to supplement them for special occasions. Each color comes in nail enamel, lipstick, and harmonizing face-powder.

Expanding Market

Among the newcomers into the rapidly expanding cream shampoo market are G. Barr & Co., Chicago, and Roycemore. G. Barr has added Balm Barr Lanolin-Creme shampoo as a sales-mate to its Balm Barr Creme-Whipped hand lotion. Balm Barr Lanolin-Creme Shampoo is planned for strong promotion on several selling points: Its ease of use for the entire family; high lanolin content for easier hair-grooming, and the fact that this shampoo, according to G. Barr & Co. needs no special after-rinse. Trellis Lanolated Shampoo is the name of the Roycemore cream shampoo which has invaded the market. Trellis is a golden, lanolated shampoo cream, attractively packaged in a blue and white four ounce jar. It is a soapless product, although it lathers abundantly in either hard or soft water, and rinses easily in warm water. Early pioneers in the cream shampoo market are certainly getting lots of competition!

Gardenias, apple blossoms and pine boughs were used to gain true color reproduction in these kodachrome cartons used for Modart Fluff Shampoo by LaMaur Products.

Hildegarde Rose, a pink-gold-rose, is Revlon's newest color contribution, packaged in a box carrying Hildegarde's color signature of a rose in a gloved hand.

Another entrant into the expanding cream shampoo market is Roycemore Toiletries, Inc., with its Trellis Lanolated Cream Shampoo, packaged in a four ounce jar.

Cool, Clean and Pungent . . .

Cool, clean and pungent . . . the bracing smell of pine woods . . . those are the qualities that have been captured and concentrated in Kreole Pine, manufactured by Manhattan Kreole Products, Inc., Brooklyn, New York. Kreole Pine is recommended as a general purpose household cleaning liquid and deodorant. ◆ Here again, the manufacturers have selected Crown Screw Caps as a safe, dependable seal. This is the cap with the patented Deep Hook Thread construction. It gives double sealing pressure with the same amount of application force. Crown Cork & Seal Co., Baltimore 3, Md. *World's largest makers of metal closures.*

CROWN CLOSURES

Your Carton

IS IT FASHION—PLUS OR DATED—MINUS?

Three years or more since most packages have had a critical analysis! A little freshness and newness might help. Why wait for competition to make you decide?

Take a good look now at convenience features, size and quality impressions, color values, protection against soiling, smooth finish for buyer-appeal. If a change is in order, run your proofs on Ridgelo Clay Coated Boxboard and notice the difference. If you want to see a better carton "as is," try a run on Ridgelo.

It's the Clay Coating on board that means clean smoothness, extra sheen for varnish and gloss inks, true reproduction of solids and color designs. Every folding carton is tailor-made. Use a fine "fabric" and cash in on good workmanship. Pick Ridgelo and you start with a truly fine folding boxboard.

Ridgelo CLAY COATED BOXBOARDS

MADE AT RIDGEFIELD, N. J., BY LOWE PAPER COMPANY

Keep saving waste paper

Representatives: Bradner Smith and Company and Mac Sim Bar Paper Company, Chicago • H. B. Royce, Detroit
Gordon Murphy and Norman A. Buist Los Angeles • A. E. Kellogg, St. Louis • Philip Rudolph & Sons, Inc., Philadelphia

POTASSIUM

. . . one "hitch-hiking" ingredient, that helps the glassmaker!

ONE reason why glassmaking is a complicated process is that so many of the ingredients bring along "hitch-hikers" — extra elements that are carried into the batch along with the main ingredient itself. One such "hitch-hiker" is potassium, which gets into modern container glass batches as part of the feldspar which is added for the alumina it contains.

Most of these uninvited ingredients are not helpful. Frequently they create conditions that the glassmaker must correct by adding other ingredients.

But potassium is different. It actually helps improve the quality of the finished ware. It acts as a flux which lowers the melting point of the batch. It helps prevent devitrification (the formation of small crystals as the glass cools), and it increases the hardness and brilliance of the glass containers.

To produce good glass, the glassmaker must not only be able to recognize and secure the purest ingredients possible but must also know how to evaluate the incidental ingredients and compensate for them where necessary. Armstrong's glassmakers, through long experience and continued research, have developed these skills to a high degree. Their success is one of the reasons why Armstrong's glass enjoys its outstanding reputation for top quality.

"Men and Glass," Armstrong's illustrated booklet, describes the making of fine glass. For your free copy, write Armstrong Cork Company, Glass and Closure Division, 3802 Prince Street, Lancaster, Penna.

PHOTOGRAPH COURTESY OF AMERICAN MUSEUM OF NATURAL HISTORY

ARMSTRONG'S GLASS
and
ARMSTRONG'S CLOSURES

BRODER INDUSTRIES

INCORPORATED

DESIGN, DEVELOPMENT & MANUFACTURING

Metal and Plastic

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the Business Previously

Conducted by

HARRY BRODER

AND ASSOCIATES

AN OPEN AND SHUT CASE FOR CUSTOMER PREFERENCE

NOTICE the ease with which Mrs. John Doe is removing the Anchor C. T. Cap! . . . And how easily, confidently she is resealing it!

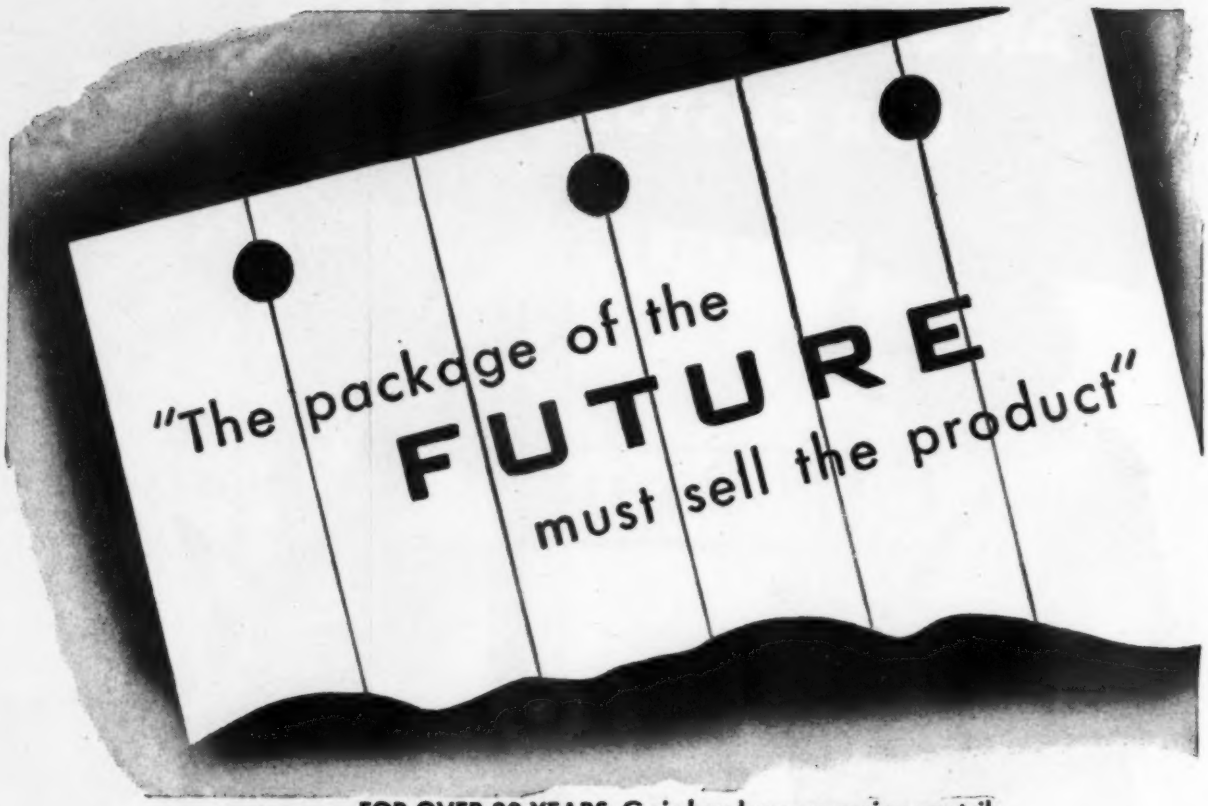
The reason Anchor C. T. Caps spin off and on so easily is because improved methods of manufacture have made possible a deeper, more broadly rounded thread which gives these caps greater limits of tolerance and eliminates friction.

And when it comes to appearance, Anchor C. T. Caps have no superior. The closely rolled wire edge, the clean narrow band of positive knurling, the deep smoothly rounded thread . . . all combine to give these caps a graceful, but at the same time a sturdy, business-like appearance.

Anchor
CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS CORPORATION
LANCASTER, OHIO

The Anchor C. T. Cap is adaptable for use on a wide range of products which require an airtight and liquid-tight seal.



FOR OVER 80 YEARS, Gair has been a major contributor to the art of packaging. Many of the great industries of America and the world have turned to Gair to solve their packaging problems. Many an obscure product has achieved international distribution due to the ingenious packaging ideas of Gair — from the cracker barrel and hoop skirt era to frozen foods. The principles of packaging that are meeting with rigid war-time standards will be utilized in packaging everything from pencils to plow shares. Send your present and postwar packaging problems to Gair.

Appealing, appetizing designs will sell the product. This Sunshine Fancy ASSORTMENT is printed in full color right on Gair Patent-coated paper board. Another famous Gair design and product. Write for Printers' Ink article by Egmont Arens industrial designer in which this Package appears.

SAVE GAIR WASTE PAPER

WRITE FOR BOOKLET "FASHIONS IN CARTONS"

ROBERT GAIR COMPANY, INC., NEW YORK • GAIR COMPANY CANADA LIMITED, TORONTO

Folding Cartons • Box Boards • Fibre and Corrugated Shipping Containers

FOR FAMOUS MERCHANDISE...

REVLON is a well-known name in cosmetics. It gets sales-producing attention by quality standards, offered in distinctive closures and containers of Plaskon Molded color. ☆ Plaskon was chosen for use with Revlon FATAL APPLE cosmetics because it assures drug trade products these advantages:

- ★ Plaskon is impervious to the effects of alcohol, acetone or other organic solvents.
- ★ Plaskon can be molded into distinctive designs and shapes.
- ★ Plaskon is available in a wide range of permanent colors.
- ★ Plaskon is not affected by oils or fats.
- ★ Plaskon is odorless, tasteless, inert.

Your molder, or experienced Plaskon men, will be glad to show you how Plaskon can be used to give your products extra sales appeal.

PLASKON
TRADE MARK REGISTERED
MOLDED COLOR

PLASKON DIVISION • Libbey-Owens-Ford Glass Company
2110 Sylvan Avenue • Toledo 6, Ohio
Canadian Agent: Canadian Industries, Ltd., Montreal, P. Q.

This is the HUNDREDTH YEAR That Swindells Have Been Making Glass in Baltimore . . . .

WILLIAM E. SWINDELL started making glass in Baltimore back in 1847—and ever since successive generations have carried on in this business.

That bit of history is important to *you*—because glass making is an art as well as a business, and the accumulation of past experience and experiments, knowledge and know-how is at your service when you bring your bottle problems to Swindell. As a matter of fact, many a Swindell worker can boast a father and grandfather who, in their day, were on the Swindell payroll and passed their secrets of peculiar skills from father to son.

Whether you need hand made or machine made bottles, private mould or stock models, you can profit by Swindell's outstanding reputation as fine bottle makers.

SWINDELL BROTHERS, Inc.
BALTIMORE 30, MARYLAND

200 FIFTH AVENUE, NEW YORK ROBERTO ORTIZ • HAVANA, CUBA

Swindell

Cuando la goma entra en contacto con los fluídos oleosos, la humedad, el calor o el frio extremados, surge una

LUCHA POR SUBSISTIR

—en que la goma sale perdiendo siempre, a menos que sea de la calidad AMEKINE, pues AMEKINE es la mejor goma sintética, inodora, que existe hasta ahora. Fué perfeccionada especialmente para usarla en los cuentagotas NEW PERFECTION, con particularidad cuando van a usarse productos medicinales de naturaleza oleosa.

HISTORIA VERÍDICA

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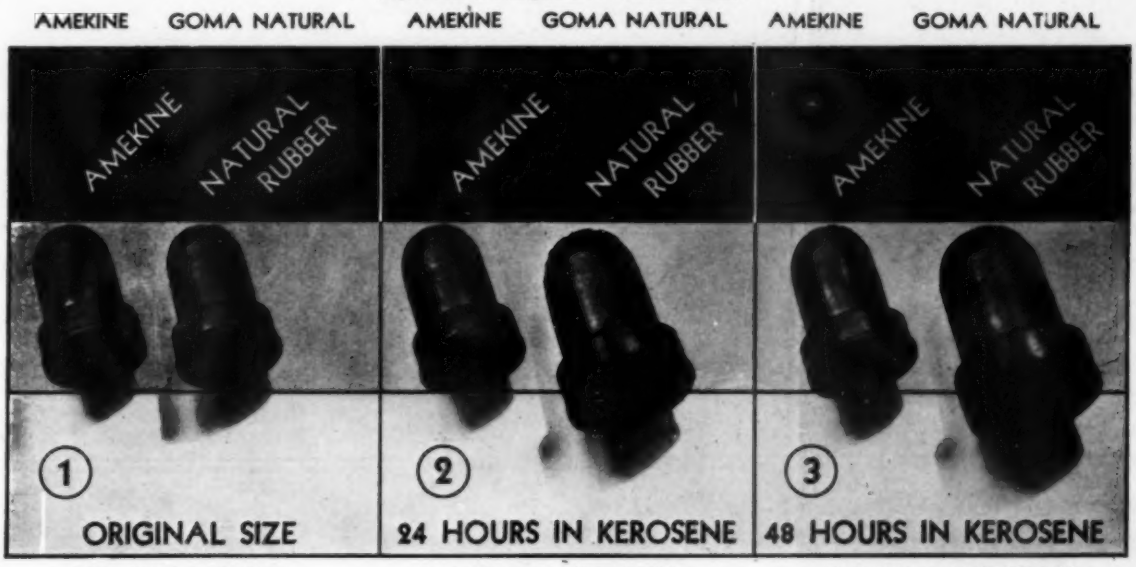


TAMANO ORIGINAL | 24 HORAS EN KEROSINA | 48 HORAS EN KEROSINA

Patentadas en los E.U.A., el Canada, la Gran Bretana y otros paises.

Esta reproducción fotográfica, sin retocar, muestra exactamente lo que sucedió a dos peras de goma del mismo tamaño original después que se sumergieron en kerosina durante 24 y 48 horas respectivamente. La primera pera es de goma sintética e inodora AMEKINE, y la otra es de goma natural de alta calidad. En esta prueba, se empleó kerosina, debido a que en uno o dos días revela los estragos causados a la goma después de varias semanas o meses, por los flúidos oleosos u otras condiciones severas; la hinchará, suavizará, desecará, o desintegrará. ¡En cambio AMEKINE, lejos de deteriorarse, en efecto parece mejorar y adquirir mayor firmeza! ¡En lugar de endurecerse o resecarse, se vuelve más flexible! MUCHAS CLASES DE GOMA SINTETICA CONTIENEN HASTA 50 o 60% de CAUCHO NATURAL, y despiden un fuerte olor que contamina las medicinas. ¡No deje usted que su experiencia con estas clases le influya contra AMEKINE! Pues AMEKINE contiene la menor cantidad posible de caucho natural—se aproxima hasta donde es posible, a ser un producto totalmente sintético. Durante un periodo de más de dos años, muchos de los principales fabricantes de productos farmacéuticos han venido usando con entera satisfacción grandes cantidades de peras de goma AMEKINE. El costo adicional es insignificante.

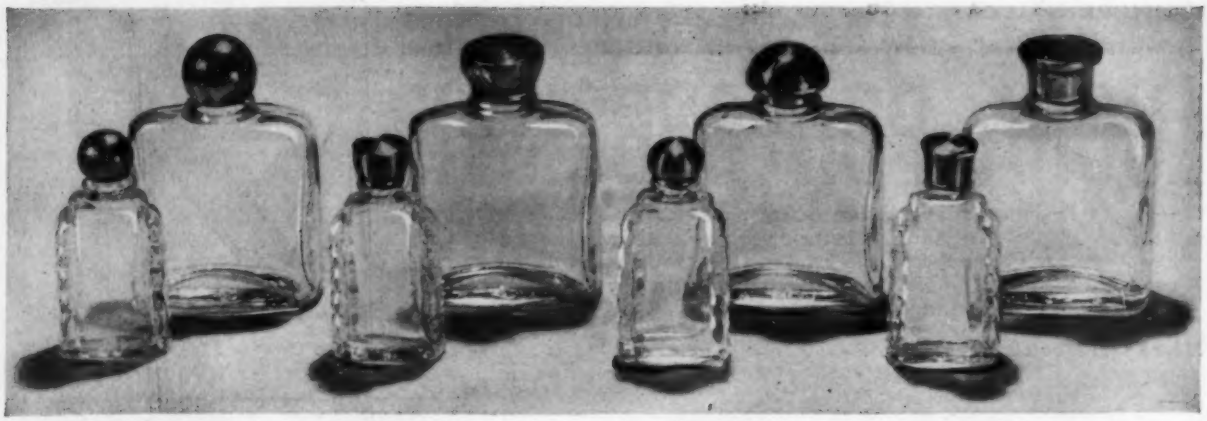
Gustosos le enviaremos a usted muestras de las peras de goma AMEKINE para que las someta en su laboratorio a las pruebas que desee.

PENNSYLVANIA GLASS PRODUCTS COMPANY, 428-432 N. Craig St.
PITTSBURGH, PA., E. U. A.

(No estamos afiliados a ninguna otra fabrica de productos de cristal.)

New Perfection

PIEZAS Y CUENTAGOTAS COMPLETOS



BALL **TULIP** **MUSHROOM** **BILTMORE**

New designs in our distinctive solid brass caps

In addition to our 8, 10 and 13 mm. solid brass BALL caps, we have created in 8, 10 and 13 mm. sizes solid brass caps in the following shapes: TULIP, MUSHROOM and BILTMORE.

These new closures will lend additional beauty to your 1, 2 and 4 dram bottles, especially as these styles will also be made in the larger sizes 18 to 24 mm.

For samples write immediately. Delivery February 1.

RICHFORD CORPORATION

221 FOURTH AVE. • NEW YORK 3, N. Y. • Phones: ALgonquin 4-6311 • 4-6312 • 4-6313

BRIDGEPORT METAL CONTAINERS

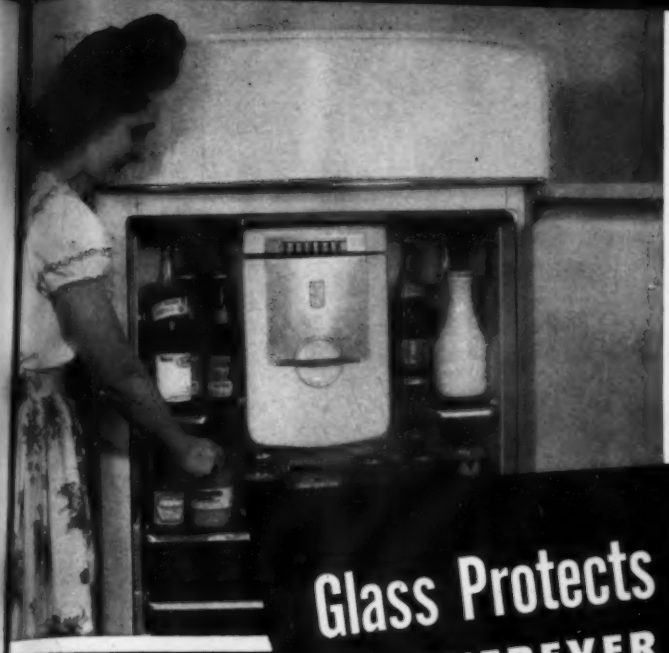
VANITY CASES
ROUGE CASES
PASTE ROUGE CONTAINERS
LIPSTICK HOLDERS (All Types)
POWDER BOX COVERS
EYEBROW PENCIL HOLDERS
BOTTLE CAPS
JAR CAPS

METAL NOVELTIES TO ORDER

THE *BRIDGEPORT* METAL GOODS MFG. CO.

Established 1909

BRIDGEPORT **PHONE: BRIDGEPORT 3-3125** **CONNECTICUT**

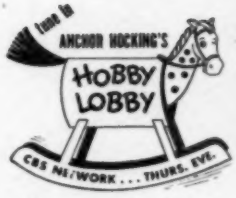


Glass Protects Your Products
WHEREVER USED!

FROM the moment your product is placed in its container, it needs constant protection. Especially so in the home of the consumer where it is most likely to be exposed to careless handling and contamination.

Anchorglass Containers provide this protection—*all the way.* They bring your product to the consumer just as you packed it—with all its strength, purity and other qualities intact. And they keep it that way until entirely used. Glass containers provide easy access to contents and may be effectively resealed time-after-time, fully protecting unused contents. They impart no foreign elements nor react chemically with most products, no matter how long stored. Clean, sparkling Anchorglass Containers permit 100% product inspection, are easy to dispense from, and tell the housewife that it's time to order more before the supply is exhausted.

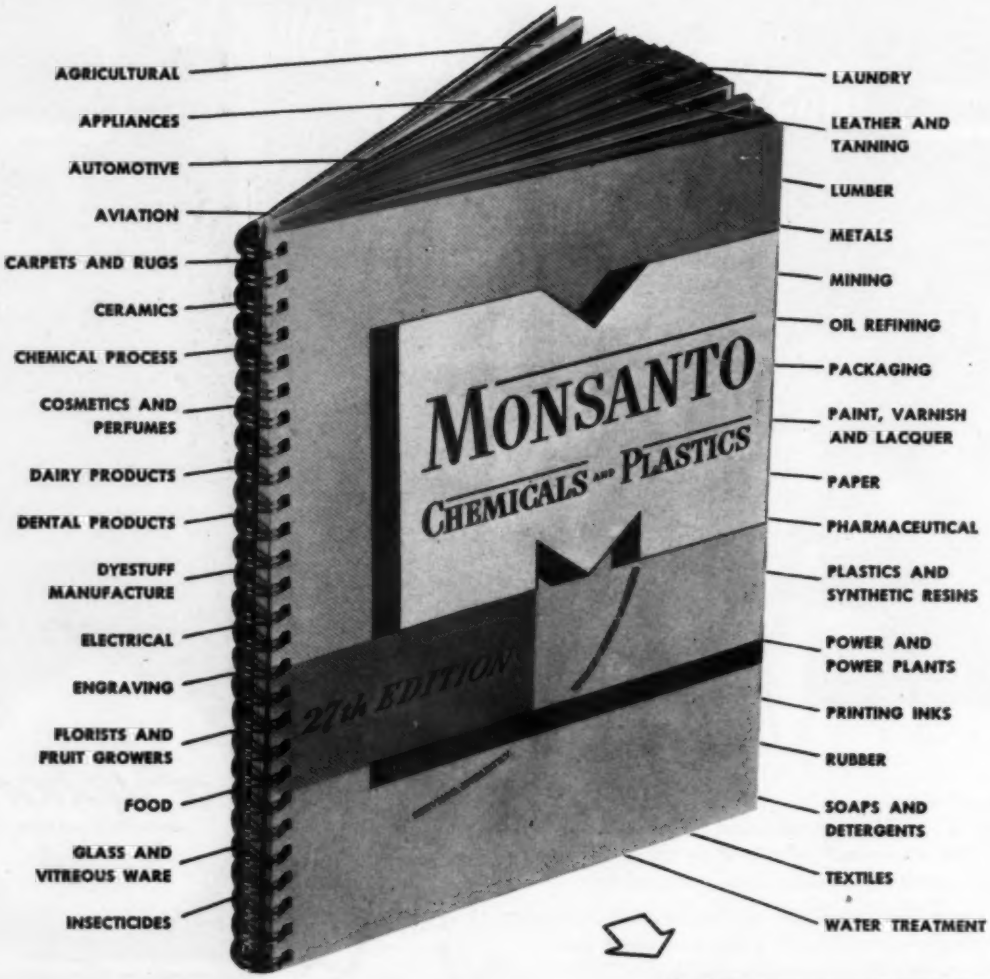
That's why women prefer glass packed products. That's why it will pay you to package your products in Anchorglass Containers. There are many production advantages to packing in glass, too, that we would like to discuss with you.



Anchor
CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS CORPORATION
LANCASTER, OHIO

NEW and now available



If you are identified with any of the above 34 industries, this new and complete Monsanto Catalog should be on your desk . . . It contains 214 pages of valuable, detailed information on more than 400 Monsanto Chemicals and Plastics — a daily guide of definite help to everyone whose thinking is geared to increased production, greater economies, better methods and improved product salability . . . Send for your copy today . . . . Fill in and mail the coupon, or write MONSANTO CHEMICAL COMPANY, 1700 South Second Street, St. Louis 4, Missouri.

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1700 South Second Street
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Please send immediately copy of your new Monsanto Catalog to

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NEWS . . .

Dr. Goodhart Named by Vitamin Institute

Robert Stanley Goodhart, M.D., since March 1943 chief of the Industrial Feeding Program Division, War Food Administration, Department of Agriculture, has been named scientific director

DR. GOODHART

of the Institute for Vitamin Research, Inc., by Dr. Theodore G. Klumpp, chairman of the Institute's board of governors and president of Winthrop Chemical Co., Inc.

Fitzgerald Dunning Named President

Dr. Fitzgerald Dunning has been named president of Hynson, Westcott & Dunning, Inc., Baltimore. He succeeds his father, Dr. H. A. B. Dunning, who is made chairman of the board. Dr. H. A. B. Dunning, Jr., has been named treasurer, and Dr. A. C. Dunning secretary.

Under the reorganization Dr. H. A. B. Dunning, Jr., will serve as director of chemical research, Dr. J. H. Brewer as director of biological research and Dr. W. C. Harden as production manager. Dr. R. D. Reid has been added to the technical staff of the organization. J. H. Irwin, manager of the New York office, is sales manager succeeding L. C. Shepherd, who will retire June 1.

Penick Grant for Estrogen Creams

S. B. Penick & Co., New York, has made a $3,000 grant to the University of North Carolina for the study of therapeutic values of creams containing mixed estrogens from natural sources.

Alice Gitter Joins Whittaker, Clark

Alice J. Gitter, first woman to have been graduated in ceramic engineering in the United States, has joined Whittaker, Clark & Daniels, Inc., New York. She will do market development work and serve as technical consultant to the company's customers on non-metallic minerals. Miss Gitter was previously with the War Production Board in Washington as chief of the Clay-Talc Unit, responsible for supply and distribution of non-metallic minerals.

Fielder Returns to Kelton

Upon his discharge from the armed forces, J. George Fiedler, has resumed the management of the Kelton Cosmetic Company. During the war Mr. Fiedler was a member of the research division of the bureau of medicine and surgery, he earned a letter of commendation as a result of his scientific work as chief chemist of the dermatology research section of the medical field research laboratory.

Seymour Taylor, who was administrator of the medical field research laboratory, has joined the Kelton organization.

Dr. Raymond Named V.P. By Searle

Dr. Albert L. Raymond, for the past ten years Director of Research for G. D. Searle & Co., Chicago manufacturers of

DR. ALBERT L. RAYMOND

ethical pharmaceuticals, was elected vice president in charge of research by the company's board of directors in December.

Proctor Medal to Dr. Richards

Dr. A. N. Richards, professor of Pharmacology and vice-president in charge of medical affairs of the University of Pennsylvania, was awarded the Procter Medal, established by the Philadelphia Drug Exchange in honor of William Procter, Jr., at a dinner at the Bellevue Stratford, January 31.

Baldwin Advanced by Lever Bros.

Charles Luckman, president of the Pepsodent Division of Lever Brothers

CLYDE BALDWIN

Co., has announced the appointment of Clyde Baldwin as manager of the Wholesale Drug department. Mr. Baldwin has been associated with Mr. Luckman since 1937, and took part in reorganization of the trade policies of Pepsodent. For the past three years, he has been executive assistant to Mr. Luckman.

Nordlinger Rejoins Conti Products

Col. Stephen L. Nordlinger, recently returned from the Pacific area, has again taken up his duties as vice president and sales manager, of Conti Products Corp.

Lt. Edward P. Huisking, who served in the Marines, has also joined the Conti Corp. as Secretary. He takes the place of his brother Frank Huisking, who was killed in action in Italy in April, 1944.

Schwarz Given Lueders Territory

J. Casper Schwarz of St. Louis representing George Lueders & Co., will call on the trade in Missouri, Tennessee, Georgia, Ohio and Indiana.

Mr. Schwarz, who is a graduate chemical engineer from Washington University, has been actively engaged in the formulation, development and manufacture of cosmetics and perfumes for the past eleven years.

FRONTIERS OF HEALTH
Laboratory Research
In the advancement of man's health, there is no "last frontier." New fields are constantly opening up. Old fields keep widening.
Forward strides in group health are marked by better balanced meals, more nourishing foods, improved housing, safer working conditions. More effective drugs and pharmaceuticals used in therapeutics and preventive medicine are likewise bringing about similar improvement in the well-being of individuals.
Common to the many frontiers of health are research activities maintained uninterruptedly and on an extensive scale. An example is the scope of the research carried on by Chas. Pfizer & Co., Inc.
In the company's laboratories, chemists, biochemists, bacteriologists and other highly trained personnel are engaged in the development of chemicals and vitamins for food enrichment and for the production of pharmaceuticals used in combating disease. Pfizer research has been a major factor in the present day mass production of penicillin.
Since its founding in 1849, Chas. Pfizer & Co., Inc., has followed a policy of progress through research. Chas. Pfizer & Co., Inc., 81 Maiden Lane, New York 7, N. Y.; 444 West Grand Ave., Chicago 10, Ill.
PFIZER
Manufacturing Chemists Since 1849

Raymond Deyo

Raymond Deyo, for forty years of the sales department of New York Quinine & Chemical Works, died suddenly at his home in Staten Island, N. Y. on February 2. He was 59 years of age. Mr. Deyo for many years traveled throughout the South for N. Y. Q. with headquarters at Louisville, but in recent years he traveled the New England territory for the firm. He never married, and lived with his sister, Mrs. Louis Marquart. Burial was in New Paltz, N. Y.

Shaw Joins Maltine; Middlemas Succeeds

Oliver Shaw, foreign sales manager, Schering Corporation, Bloomfield, N. J., resigned effective February 1st, to join the Maltine Company, New York.

Robert S. Middlemas has been appointed to take Mr. Shaw's place. For the past year and a half he was south American divisional manager for the Schering Corporation. Mr. Middlemas has for many years been associated with a number of leading American companies in South America.

Weisman Joins Kelton Cosmetics

S. J. Weissman just separated from the Navy, is now associated with Kelton Cosmetics Inc., New York, in a sales capacity.

J. O. Ross 25th Anniversary

The J. O. Ross Engineering Corporation recently celebrated its twenty-fifth anniversary with a dinner party at the Hotel Roosevelt January 17,

J. O. ROSS

and a theater party on January 18 both of which functions were attended by all office employees and their wives. Nearly 200 guests were present including employees from all the company's offices in New York, New Brunswick, N. J., Boston, Chicago, Detroit, Los Angeles, and Canada.

A feature of the event was the presentation of a beautiful silver gift from the employees to J. O. Ross, founder, and now chairman of the board. Gifts were also presented to F. W. Partsch of Boston, vice-president, and Richard Schultz, both of whom were members of the original organization when the business was started in 1921. When presented with his gift, Mr. Ross gave a short talk in which he outlined briefly some interesting facts of the company's history. He explained how the company,—today one of the largest concerns building air handling machinery and equipment for all types of industrial processing—was formed at the low point of the 1921 depression. Eighty-nine orders, some as low as $9.00, were placed with the company during the first year and these were handled by the organization which at that time consisted of three men besides Mr. Ross, and two girls.

S. W. FLETCHER

To organize an air conditioning department, the company hired a man who had some experience in that field. This man was S. W. Fletcher who joined the company in 1923 and is now president of the company.

Dodge Heads Vanilla Bean Assn.

At the annual meeting of the Vanilla Bean Assn. of America Inc., held at the Hotel Pennsylvania, New York, February 1, F. T. Dodge, Dodge & Olcott Company, was elected president, Edward S. Buckley, Thurston & Braidich, vice-president; J. Manheimer, of J. Manheimer, treasurer.

The board of directors consists of Chester A. Smeltzer, Daumann & Smeltzer Inc., Ferdinand Weber, George Lueders & Co., and William Schilling Jr., Norda Essential Oil & Chemical Co.

Bogner Resigns from Arden

Franz Bogner, cosmetic chemist and perfumer, who joined Elizabeth Arden Inc., in 1935 left January 31. He was engaged in screen and stage make-up in Elizabeth Arden Laboratories in

FRANZ BOGNER

Hollywood until called to New York, where he was in charge of research and production.

Creative Printmakers Move

Creative Printmakers Group, has moved to a new location 200 Varick St., New York.

Reilly Joins W. F. Zimmerman

Gordon E. Reilly recently returned from two years overseas with O.S.S. has joined W. F. Zimmerman Inc., as sales representative. He was formerly associated in sales capacity with Dermetics Company and Halliwell, Inc.

Couderchet to France

M. G. Couderchet of Naugatuck Aromatic's, left for France February 5th on TWA's inaugural direct-to-Paris flight. On a trip of six weeks duration Mr. Couderchet expects to visit Grasse in southern France, Casablanca and Switzerland.

Augenblick Becomes Consultant

Maurice L. Augenblick announced the opening of a laboratory and office at 467 Drexel Building Philadelphia. Mr. Augenblick was formerly chief chemist for Nevins Drug Co., Philadelphia.

Kennedy Resigns as Primrose President

James C. Kennedy, Jr. has been elected chairman of the executive committee in charge of research and development of Schieffelin & Co., New York. He has been a director of this company for the past seventeen years.

Mr. Kennedy recently resigned as president of Primrose House, Inc. He is still being retained as consultant advisor to the company.

In honoring the "ten outstanding young men in America" by the United States Junior Chamber of Commerce. Charles Luckman, (front left), newly appointed executive vice-president of Lever Brothers Company, received a new honor. Shown with Mr. Luckman are (left to right) James A. Linen, publisher of Time, Hugh Kearns, president of the U. S. Junior Chamber of Commerce, who Presented the awards, Henry Ford II, and Mayor Edward J. Kelly of Chicago.

Macy Leases Warehouse

R. H. Macy & Co. has leased the main floor of the old McGraw-Hill Building, 475 10th Ave. at 36th St., New York City. The space, which totals 14,000 square feet will be used for expanded office and warehousing facilities for the sale and distribution of Supremacy drugs, cosmetics, and sundries.

MM&R Sales Meeting

"The nation and the many industries served by the essential oil industry stand on the threshhold of a great period of prosperity," said Percy C. Magnus, president of Magnus, Mabee & Reynard, addressing the three-day sales meeting recently held in New York, "and MM&R, as it embarks on its second half century shall go on to new goals in 1946."

George H. McGlyn, treasurer of the company predicted slowly accelerated supplies during the first six months of this year, increasing to near normal in the second half of the year.

William F. Fischer, general sales manager, told of an important drift in the food industry away from whole spices to spice oils, and in the candy industry the shift away from hard candies because of the sugar shortage would not be a deterent to greater flavor volume because the industry would shift to higher priced candies to maintain dollar volume.

Vice-president Talmadge B. Tribble, using a two per cent average for flavoring and perfuming, arrived at a potential market of approximately $60,000,000 for the essential oil industry.

Hutchinson's 50th Anniversary

D. W. Hutchinson & Co., New York. is marking its fiftieth anniversary. The company was organized in 1896 by D. W. Hutchinson, Sr., with offices on Murray street, subsequently moving to to Cedar st. and thence to Maiden Lane. In 1935 the company moved to its present address at 162 Front street.

Smith Joins Ertel Sales Staff

Ertel Engineering Corporation, Kingston, New York, announced the appointof Lt. S. S. Smith to its New York City sales office. Prior to his three and one half years in the U. S. Naval Reserve, Mr. Smith who is a bacteriologist, was active in bacterial research work.

Nagle Named Crown Cork President

John J. Nagle has been elected president of the Crown Cork & Seal Company, Charles E. McManus, chairman of the board announced. Mr. McManus has resigned as president but will continue to take an active part in the affairs of the company.

F. Erwin Fusting vice-president, succeeds Mr. Nagle as treasurer and Walter L. McManus will be secretary of the company.

Wm. S. Merrell Research Appointments

Dr. Henry R. Kreiders, promotion to the post of chief chemist has been announced by Dr. R. S. Shelton, vice president in charge of research at the Wm. S. Merrell Co. Other additions to the staff of the Merrell antibiotics research and production division are Dr. Frank J. Rudert and Dr. Robert E. Allen. Dr. Rudert will have charge of the development of new antibiotics, while Dr. Allen will work on the purification of new antibiotics.

William and Richard Huisking Return

After being connected with the atomic bomb project for the past several years, at Oak Ridge, Tenn., Lt. William W. Huisking have returned to his duties as Secretary and Director with Chas. L. Huisking & Co.

Lt. Richard V. Huisking, back from service in the Pacific has received his discharge from the Navy, and also rejoins the Huisking Company in the Export Department.

Climaxing the three-day conference of Magnus, Mabee & Reynard, Inc., attended by sales representatives and key personnel from all over the country, a banquet was given at the Hotel Astor on January 6.

Dr. Sherwood Joins Winthrop

Dr. Reginald C. Sherwood, most recently with the U. S. Department of Agriculture, Washington, D. C., and formerly wice-president of the Special

DR. SHERWOOD

Commodities Division, General Mills, Inc., has joined the Winthrop Chemical Co., Inc., in the newly created position of technical director of the Special Markets Division.

Robert S. Whiteside, associated with the division since 1941 has been promoted to assistant to the director of the Special Markets Division.

Prior Advanced by Givaudan

M. J. Prior who has for some years been associated with the sales office of Givaudan-Delawanna, Inc., has been transferred to the outside sales staff.

F. W. Bristol Joins Bristol-Myers

Fredrick W. Bristol, has become associated with the sales department of Bristol-Myers Company, New York. He will handle various activities in the field of sales promotion for the company.

Gamble Joins Monsanto

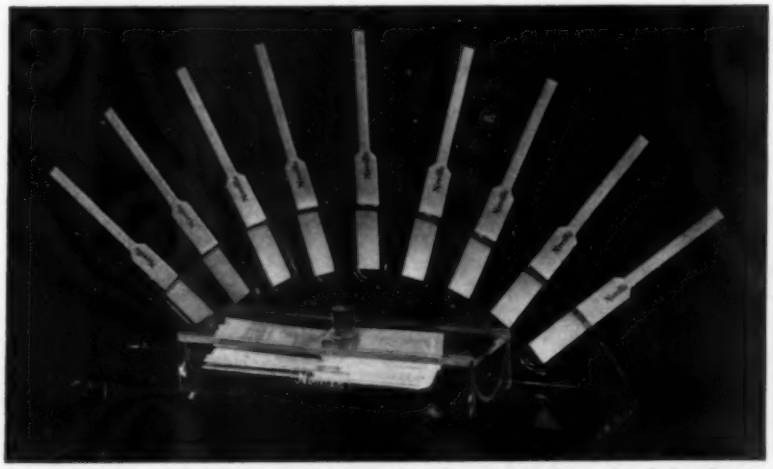
The appointment of Edward W. Gamble, Jr., as sales assistant to the president of Monsanto Chemical Co., was announced by William M. Rand, Monsanto president. From 1922 until 1942, Gamble was a sales and administrative executive of New York brokerage houses, and through much of the war served with the Office of Strategic Services.

Mackinnon—N. Y. Q. Purchasing Agent

The New York Quinine and Chemical Works, Inc., has Barclay E. Mackinnon in the post of purchasing agent. Mr. Mackinnon joined the N.Y.Q. in 1933 as assistant to the purchasing agent. In 1942 he left to go in the army. At that time he was the assistant purchasing agent and in charge of export sales.

Purchases De Kama

Eugene Coleman, Jr., president of de Heriot, Inc., together with his associates, has purchased De Kama Inc.. De Kama Inc., was originally organized by Dr. Armand De Kama, who died nine years ago and since then the company has been headed by his widow, Alexandria De Kama. Mrs. De Kama will continue with the new organization in an advisory capacity. De Kama Inc., will be operated as a treatment line and as a separate organization with de Heriot Inc., except that de Heriot salesmen and representatives will also handle the De Kama line.



The above beautiful and convenient perfume testing paper holder made of clear Lucite was distributed during the holiday season to friends and customers by Noville Essential Oil Company.

R. B. Magnus—Drug Dinner Chairman

Robert B. Magnus, vice-president of Magnus, Mabee & Reynard, and treasurer of the Drug, Chemical and Allied

ROBERT B. MAGNUS

Trades Section of the New York Board of Trade, has been appointed chairman of the Dinner Committee for the Drug Trade Dinner to be held March 14, at the Waldorf-Astoria Hotel.

Mutual Drug Buys in Portland

The Mutual Wholesale Drug Company has purchased a three story brick structure at North Broadway and Wheeler Streets, Portland, Ore., for use as headquarters. Cost of the building and remodeling will call for an expenditure of $65,000.

Packaging Machinery Institute Meeting

The semi-annual meeting of the members of the Packaging Machinery Manufacturers Institute, will be held at the Hotel Dennis, Atlantic City, New Jersey, on Monday, April 1st 1946,

---

Brown Named Pierce Sales Mgr.

Lt. Arthur C. Brown, on terminal leave from the Navy, has been made general sales manager of Pierce's Proprietaries, Inc. Buffalo, N. Y., prior to joining the Navy, Brown was assistant sales manager, drug department, Procter and Gamble.

Wallach Joins Whitehall

Miles A. Wallach has joined Whitehall Pharmacal Company and will head its advertising research department.

Rotondaro Joins Zemmer Co.

Dr. F. A. Rotondaro, for ten years with the Food and Drug Administration in Washington, has joined the Zemmer Company, Pittsburgh.

HIGHLIGHTS FROM THE FEBRUARY ISSUE

American Druggist

THE BUSINESS MAGAZINE OF EDITORIAL VITALITY

Labor-Management in a Drug Store

Most retail drug stores operate with limited personnel, and because of this, the boss works elbow to elbow with the clerks. So that this close relationship may continue as a profitable arrangement, this issue points the finger at the faults of both employee and employer and asks for fair appraisal. Harmonious employee relations are important to sales.

The Fair Trade Fight

There's an old fallacy that reads, "what you don't know won't hurt you," that is even more fallacious when it applies to retailing. Currently, fair trade is receiving the brunt of a well-concentrated battle in the District of Columbia where efforts to pass a fair trade bill have been widely opposed. Because this fight may become national, this issue reports it in full.

Readership Creates New Department

In order to handle the increasing volume of reader requests for special data, books, posters, etc., we announce the creation of a new editorial service department with George A. Bender as Service Director. He was formerly editor of NARD Journal and comes to American Druggist direct from the U.S. Dept. of Commerce. As Service Director he will direct and correlate special editorial services to our readers, i.e., the annual Blue Book of prices and products, the annual Market Data Book and the Market Service Department.

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People Like to Look at Pictures

Ever see a page of pictures that didn't stop you? At least one or two photos of a group have some stop-look-read-the-caption appeal, and that's why this issue contains a new embellishment on an old department. The well read People and Events department this month starts off with a spread of nine pictures that mean something to retailers and the rest of the industry. From now on out, it will be People and Events in pictures, as well as in words.

AMERICAN DRUGGIST, 572 MADISON AVENUE, NEW YORK 22, N. Y.

Milton Again Heads Can Institute

George A. Milton, president of the Milton Can Company of Brooklyn, N. Y., was re-elected president of the Can Manufacturers Institute, on January 14th.

Alsop Jr. Joins Alsop Engineering

Capt. Samuel Alsop, Jr. has just been released from the U. S. Army after 34 months overseas. He has joined the Alsop Engineering Corp.

Having served in the U. S. Maritime

CAPT. SAMUEL ALSOP JR.

Service for almost three years. Robert J. Landon goes with the Alsop Engineering Corp., as Advertising Manager.

JUSTIN W. ADDINGTON

Abbott Advances Addington

Justin W. Addington, of Abbott Laboratories, has been promoted from manager of the Minneapolis branch to the new position of assistant general sales manager in charge of field employment and training. Mr. Addington came to Abbott in 1926, was made a district manager in 1934, and a branch manager in 1942

F. A. Bergman Joins Jeurelle

Jeurelle, Inc., announced that Franklin A. Bergmann has joined them as assistant to the executive vice president, H. L. Grafer.

Beauty Fashion Awards

The BEAUTY FASHION Awards for 1945 have been presented to: Lucien Lelong for Packaging; Chen Yu for Advertising; Revlon Products for Promotion; and Prince Matchabelli for Merchandising Policy.

Monsanto Plastic Package Dept.

Monsanto Chemical Company's Plastic Division has set up a packaging materials department under the direction of R. C. Evans, who will have under him a staff assigned full time to packaging problems. These men will concern itself with all major uses of plastic resins alone and in conjunction with paper metal foil, paper board, and transparent sheets in packaging. Since April 1944, Mr. Evans has been an assistant sales manager in charge of sheet and vinyl resin sales, having previously served in charge of sales development for Vuepak in Detroit, Chicago, and St. Louis Territories, and later as branch manager of the Plastics Division with headquarters in St. Louis.

Heyden Buys Plastic Stock

B. R. Armour, president of the Heyden Chemical Corp, New York, has announced that the company has acquired the stock interest of S. Karpen & Bros., in the American Plastics Corporation and now holds about two thirds of the outstanding shares.

Paul Pearson Joins Dana Perfumes

Paul Pearson, well known in the toilet goods industry, has joined Dana Perfumes, Chicago, as assistant to Waldo V. Lossow, director of sales. For eleven years Mr. Pearson was associated with Filene's in Boston as an executive in the toiletries department.

Hooker Advances Bovier

The Hooker Electrochemical Company of Niagara Falls, has recently assigned Lloyd S. Bovier to the sales development department. Mr. Bovier, formerly sales representative in the central states, will devote himself to field work in the application of new Hooker chemicals to industry.

T. G. A. Meeting May 15-17

The Toilet Goods Assn., will hold its annual convention at the Waldorf-Astoria May 15, 16 and 17th.

D. & O. Insecticide Div. Moves

The offices of the Insecticide Division of Dodge & Olcott, Inc. have been moved to 60 East 42nd Street. The telephone number will be Murray Hill 2-6700.

Owens Appoints Kohl and Robertson

Appointment of Arthur Kohl as manager of the Household and Chemical Products Division and W. M. Robertson as manager of the Pharma-

ARTHUR KOHL

ceutical and Proprietary Division of the Owens-Illinois Glass Company, by Eugene F. Bertrand, sales manager of

W. M. ROBERTSON

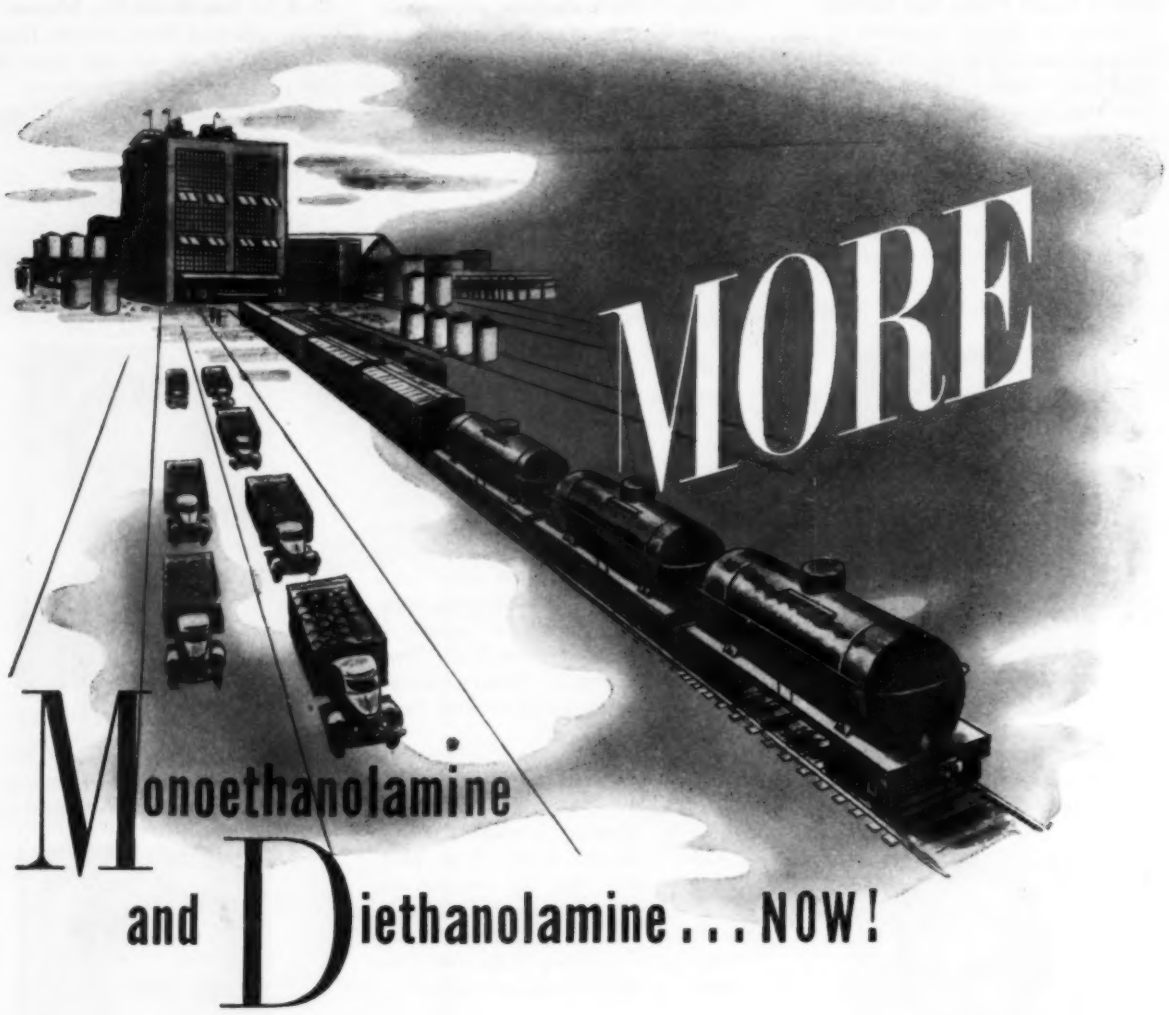
the Drug and Chemical Industries Divisions, has been announced by Smith L. Rairdon, general sales manager.

Shoup, Jr Named Sales Manager

A. D. Shoup, Jr., vice president and general manager of Shoup-Owens, Inc., has assumed duties of the former sales manager, J. S. Leigh, who resigned January 1st.

Broder Industries, Inc.

Harry Broder and Associates, have been incorporated into the Broder Industries, Inc., they are located at 161-167 West 64th Street, New York, N. Y., Telephone number is Trafalger 7-0092.



Monoethanolamine and Diethanolamine . . . NOW!

Carbide and Carbon Chemicals has just completed a new plant for the production of monoethanolamine and diethanolamine. This plant is now in operation and will serve to meet the increasing demand for these two important amines.

Chemically active, monoethanolamine and diethanolamine react both as alcohols and amines. As mild bases they combine directly with acids and acid gases.

Both are used to make amine soap emulsifying agents, monoethanolamine being preferred when an amine with a low combining weight is desired. They are useful in concentrating carbon dioxide and for removing acid gases from natural gas and crude hydrogen. Diethanolamine is an intermediate in many organic syntheses; it is especially valuable in the preparation of wetting agents and detergents.

Write for prices and the booklet "Amines" (Form 4770).

Carbide and Carbon Chemicals is a major supplier of amines, and produces 34 amines in commercial or research quantities.

CARBIDE AND CARBON CHEMICALS CORPORATION

Unit of Union Carbide and Carbon Corporation

UCC

30 East 42nd Street, New York 17, N. Y.

SYNTHETIC ORGANIC CHEMICALS

Dr. Osterberg Joins Abbott Labs.

The appointment of Dr. Arnold E. Osterberg to the Clinical Investigation Staff of Abbott Laboratories has been announced by Dr. J. F. Biehn, Medical Director of the company.

DR. OSTERBERGER

Dr. Osterberg has been associated with the Mayo Clinic since 1917 and head of its section on Clinical Biochemistry since 1922.

Northam Warren, Jr. Returns

Major Northam Warren, Jr., released from active duty has rejoined Northam Warren Corp., as vice president. His duties will be those of assistant to the president and will cover all activities of the company.

Finlayson Appointed by Lehn & Fink

D. J. Finlayson, recently general field manager for the Thomas J. Lipton Company has been appointed general sales manager for the Lehn & Fink Division, Lehn & Fink Products Corp.

Continental Can Buys Filer Fibre

The Filer Fibre Company, manufacturers of Kraft pulp and paper, Filer City Michigan, was purchased by Continental Can Company, January 28, according to Carle C. Conway, chairman of the board and president of the Continental organization.

Charles A. Chrystal Named Treasurer

Charles A. Chrystal was elected treasurer of Charles B. Chrystal & Co., in January. Mr. Chrystal has been with the company for the past eight years, employed first as a salesman and then appointed to the position of assistant treasurer.

Wellbrock Named N. J. Machine Sales Mgr.

Richard Wellbrock, for nine years sales engineer for the New Jersey Machine Corporation of Hoboken, has been appointed sales manager to succeed Carl Claus, who recently resigned. During Mr. Wellbrock's association with the corporation, he has traveled extensively studying and solving packaging problems in many plants.

Sands Joins Affiliated Products

H. W. Roden, president of Affiliated Products, Inc., announced that G. W. Sands has joined his organization as director of production and purchasing. Mr. Sands has had wide experience in purchasing and production phases of the toilet goods industry. He was formerly head of production planning at Richard Hudnut.

Sales executives and field representatives of the manufacturing division of McKesson & Robbins, Inc., at the division's semi-annual sales conference held in Bridgeport, Conn., January 9th. Shown at the entrance to the company's plant and laboratories.

Nitardy Retires from Squibb

Ferdinand W. Nitardy, for over a quarter of a century one of the outstanding figures in the scientific phases of manufacturing pharmacy, has retired from active work. After laboring hard

FERDINAND NITARDY

and long during the past twenty-nine years for E. R. Squibb & Sons, Mr. Nitardy is going to "take it easy" and devote himself to his stamps (he is a phelatilist of long standing), to travel, and other enjoyable hobbies and pursuits. Mr. Nitardy was extremely active on scientific committees of manufacturing associations and revisions committees of the official compendia for the many years that he was superintendent of the Squibb manufacturing laboratories in Brooklyn. When war clouds developed and Squibb formed an international company to develop Latin-American business in a real way, Mr. Nitardy became vice-president of this new company and spent his time working on development of laboratories and scientific problems to be applied in the countries of the Western Hemisphere south of the United States.

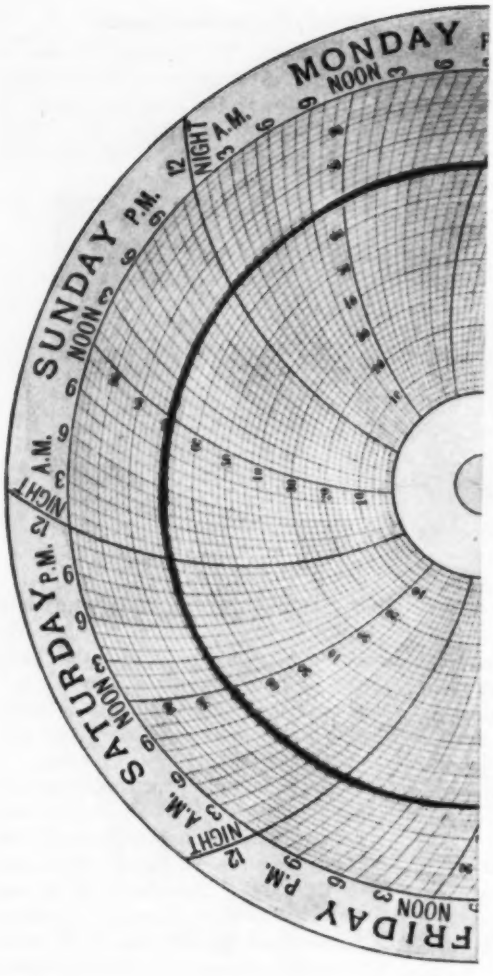
Frank Edward Starts Business

Frank J. Edwards, who has been identified with the chemical industry for over twenty-five years and formerly with Grasselli and the du Pont Company, has announced the formation of the Frank J. Edwards Company for the distribution of chemicals for import, export and domestic.

The new company will maintain offices at 15 William Street, New York.

Goldman Rejoins Remus

Discharged from the U. S. Navy after four years of service, Arthur Goldman is back, calling on the trade, in New York, New Jersey, and Philadelphia, for Edward Remus & Co., Inc., New York.



for precision cooling like this

... TURN TO

When temperatures have to be held right on the nose . . . when variations of only a few degrees will ruin an entire batch . . . depend on G-E Refrigeration for precision cooling.

G-E completely automatic refrigeration will hold any temperature level . . . hold it for weeks or minutes as predetermined by you. Or the temperature level can be set to vary automatically to meet any process requirements.

Chemical and industrial engineers prefer G-E equipment because they *know* they can depend on it. They know, too, that G-E equipment requires a minimum of service . . . and is noted for its long-lasting qualities.

For full information on G-E refrigeration and air conditioning equipment, contact your G-E distributor. You'll find him listed in your Classified Telephone Directory under "Refrigeration" or "Air Conditioning." *General Electric Company, Air Conditioning Dept., Section 6042, Bloomfield, N. J.*

GENERAL ELECTRIC

Industrial Refrigeration

F. W. D. A. Mid-Year Meeting

The Mid-Year meeting of the Federal Wholesale Druggists Association, held at Hotel Pennsylvania, New York, February 5 to 7 set up a new record in attendence. The joint manufacturer-wholesaler meeting was opened with a luncheon at which Bruce Barton, president of Batten, Barton, Durstine and Osborn spoke on "Must We Have Another Bust?" Speakers at this session were C. S. Ching, former member of NWLB and director of industrial and public relations of U. S. Rubber Company, who spoke on Management-Labor Relations; D. W. Michener, associate director of research of Chase National Bank, who spoke on "The Post-War Economic Future"; Dr. Vergil D. Reed, associate director of research of J. Walter Thompson Company, who spoke on "Business Trends and Their Effect on Merchandising."

Other speakers at the meeting included John J. Toohy, vice-president of E. R. Squibb & Sons, who was narrator for the film, "Keys to Better Selling"; Harry Sylk, president of Sun Ray Drug Co., on "Retail Sales Promotion at Point of Sale"; Eugene Bertrand; Owens-Illinois Glass Co., narrator for the color and sound film, "Now for Tomorrow"; C. J. Blackstrand, vice-president of Armstrong Cork Co., on "Modern Wholesaling"; Fen K. Doscher, Lilly-Tulip Cup Corporation, on "The Sales Manager Looks Ahead"; Stanley Talbott, N. W. Ayer & Son, San Francisco, on "Direct Action Selling."

Sam Davis

Sam Davis, district sales manager of Wyeth Incorporated, died suddenly in Philadelphia at the age of 50 years. Mr. Davis, whose home was in Philadelphia, is survived by his wife and son.

Schilling Heads Essential Oil Ass'n

William Schilling Jr., Norda Essential Oil & Chemical Co., has been elected president of the Essential Oil Association of U. S. A. Other officers elected at the annual meeting of the association held January 11, are: Vice-president, Louis Rapin, Antoine Chiris Company; secretary and treasurer, Robert B. Magnus, Magnus, Mabee & Reynard; executive committee members, Gerard J. Danco, Gerard J. Danco, Inc.; F. C. Buehler, George Lueders & Co.

W. SCHILLING, JR.

Merck Sees Good Business

Good business prospects for drug and chemical manufacturers for some years to come were forecast at a recent meeting of department heads and field sales district managers of Merck & Co., held at Rahway, N. J. Reasons for the prediction include widespread demand for such relatively new products as DDT, penicillin, streptomycin, and the continued heavy demand for sulfa drugs, as well as increasing requirements for vitamins, and medicinal and industrial chemicals.

G. S. Furman, director of Merck's field sales department, presided at the sessions. District managers present were: R. G. Anderson, Phila.; G. J. Brinkman, St. Louis; R. A. Cooke, Los Angeles; C. Duvoisin, Baltimore; J. M. Gaston, Indianapolis; T. M. Hoopes, St. Louis; W. S. Lowry, Detroit; J. F. Neill, New York; L. W. Robinson, Atlanta; M. C. Schuehle, Boston, J. A. A. Scott, Chicago.

Robert C. Mautner

Robert C. Mautner, 46, of Summit, N. J., for the last 22 years associate medical director of Ciba Pharmaceutical Products, Inc., died January 27 in Mt. Sinai Hospital, New York City, after an illness of a week.

During his tenure at Ciba he was responsible for the development of some of the firms leading ethical specialties. In cooperation with Dr. James Hamilton of Albany and Yale Medical schools, Mr. Mautner initiated early clinical research which led to the isolation and crystallization of the male hormone.

Claude M. Crawford

Claude M. Crawford, of Dallas, Texas, formerly southwestern branch manager for Bristol-Myers Company, died January 2, at Baylor Hospital, Dallas, after having suffered a heart attack on Christmas Eve.

Mr. Crawford, who retired from active service in 1944, was well known in southwestern drug circles, having been a representative for Bristol-Myers for 30 years.

Waters H. Sellman

Waters H. Sellman, manager of the Upjohn Company branch in San Francisco, died suddenly at his home on January 24, 1946. Mr. Sellman would, on February 16, have completed 35 years in charge of this office, the first and only manager it has had.

A native of Maryland, Mr. Sellman began his selling career on the Atlantic seaboard, but early in the century he transferred to the Pacific coast. In 1906 the San Francisco earthquake swept away all his stocks and records, leaving him only the good will he had built up there. Undaunted by this setback, Mr. Sellman started all over again, meeting with such success that the Upjohn Company in order to take care of the growing requirements of this territory elected to open a branch there on February 16, 1911, with Mr. Sellman as manager.

Ground was broken for the $2,000,000 structure that the United-Rexall Drug Company will use as headquarters in Los Angeles. President Justin W. Dart expects to move into the new building within ten months.

Development of Pharmaceutical Specialties

(*Continued from page 196*)

Research Procedure

When the New Products Committee, or its equivalent, has recommended that research be conducted in a certain direction with the ultimate objective of developing a new product, and management has authorized an expenditure for the purpose, the research department then carries on from that point. It has often been said that research cannot be made to fit into any fixed pattern. Too many encumbrances can certainly stifle originality and progress in any research project. This, however, does not preclude the need for some measure of organization in the conduct of a research program. Research in industry has been shown to yield its biggest returns when carried on within a framework designed with due regard to certain basic principles of organization. In this connection we are concerned with organization of research procedure as distinguished from the research plant.

One of the first policies to be established is the fraction of effort which should be devoted to this or that type of research. Various terms have been used from time to time to describe types of research—pure, applied, practical, fundamental, and so on. The development of new pharmaceutical specialties is without question applied research, dependent upon fundamental research conducted either within or without the company. Industry obviously is most interested in supporting applied research, but it would indeed be shortsighted to fail to carry out, or support, the fundamental research from which profitable applications are drawn.

The problems undertaken by the research department should include both short and long range types, with the time devoted to each about equally divided. In this way new products can be made available at regular intervals to aid in the support of long term investigations. At times research on short range problems is spoken of as empirical, and that on long range problems systematic or fundamental. Such a classification or distinction may be misleading, for so-called "empirical research" to be successful should be systematically and orderly executed. The emphasis is on achieving a limited objective in as short a time as possible. The degree of success in this type of research depends to a large extent upon the knowledge and experience built up over a period of time by previous work on both long and short range problems. Continuous systematic study develops the ability to perceive quick solutions to a problem and to sense possible new products requiring only limited research. What is frequently believed to be a "hunch" is a normal response to stimuli aroused by the pursuance of a basically sound research course. Too much reliance on empiricism is dangerous, for success by this method of approach is sporadic. A research method dependent chiefly upon lucky guessing could hardly be considered well suited to the needs of modern industry. It is true that some of today's important medicinal agents were developed or discovered in an empirical fashion, in some instances by persons lacking in scientific knowledge and background. Few, however, would advocate that the same empiricism characterizing ancient folklore should dominate today's attack on disease.

Long range problems may require two or more years for completion. They may involve fundamental investigations with no immediate prospect of any return in the form of a new product. Yet out of such investigations often come the major developments which establish a company's position in its field. To be identified with such a major development is a valuable asset.

Apart from the reasons just given for including both long and short-range problems in the research program, it is also desirable that several projects be underway at any one time because the element of chance cannot be fully eliminated from research. As it is not known in advance where lightning will strike, it is not possible to foretell which research projects will lead to profitable new products.

Irrespective of the type of problems included in the research program, the general procedures followed in the solution of these problems will be essentially the same, consisting of the following steps:

(1) *Survey of the Literature:* Too much emphasis cannot be placed on the importance of undertaking a search of the literature-medical, scientific and patent—prior to initiating an extensive experimental program. Much money and time can be saved by avoiding repetition of work that has already been done. Moreover, a good literature search enables the research worker to become better acquainted with the field. This background of information will be an indispensable aid in planning and carrying out the experimental program, and in formulating ideas for patenting. Obviously a good library should form part of the research organization. As mentioned earlier, the library is an important research tool and every effort should be made to enlarge its usefulness by increasing the number of scientific journals in its files, by purchasing new books of interest, and by providing personnel to aid in the preparation of bibliographies and abstracts. When the laboratory is located close to large cities with good medical and scientific libraries, it will be advantageous to make arrangements for the use of these facilities.

In order to derive the maximum possible value from literature searches and at the same time to have the information gathered readily available for future reference, it is desirable

(*Continued on page 255*)

Both cost the same . . .

Which way are YOU buying water?

For each dollar spent for water, the Dorrco D-I System will give you 5,000 to 50,000 gallons—the equivalent of distilled water in purity. That is *30 to 40 times* the amount of *distilled water* you can buy with the same dollar! And water delivered by the Dorrco D-I System is of the exact degree of softness, purity, or mineral content required for your use.

Dorrco D-I Unit installed at Holland Rantos Company, Inc., New York City

WHERE USED The Dorrco high-speed, high-capacity, ion-exchange water purification system is used in many process industries including chemical plants, cosmetic factories, pulp and paper plants, food processing plants, pharmaceutical plants, and ceramic plants.

WHAT IT DOES The Dorrco D-I System is used to remove simple hardness, to reduce bicarbonate alkalinity, for reduction of total solids, and for the recovery of valuable metals from waste water. This system can be used in almost any process in which water purity is a factor and cost a consideration.

• It is applicable to plants requiring but a few gallons of pure water a day for laboratory use, and to large plants using millions of gallons daily.

OPERATION De-Ionization is usually carried on in two steps. The first stage (cation exchange) passes raw water over a bed of exchange material which removes the calcium and magnesium constituents. If desired, sodium and other metallic salts can also be removed at this stage. In the first case, the exchange bed is regenerated with ordinary salt; in the second, where total removal is necessary, acid is used as a regenerant.

The anion exchanger then adsorbs the acids resulting from the cation exchange: It is usually regenerated by sodium carbonate.

For further details and information on water purification, "made-to-order" to your plants' needs, write or call your nearest Dorr office.

230

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Where Packaging Efficiency must be at its HIGHEST...

...there you will find machines of the Package Machinery Co. at work.

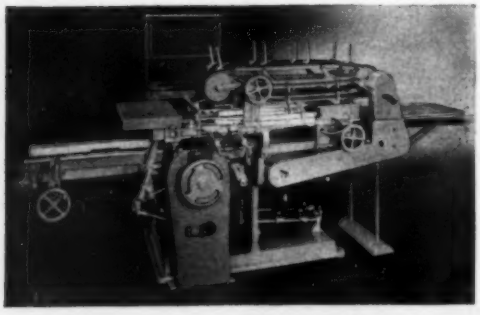
The gum wrapping machines illustrated have conveyors for the cartons in which the gum is packed. One belt of the conveyor delivers empty cartons to the packers; the other carries the filled cartons to the FA wrapping machines which wrap them in printed wrappers, registered by electric eye.

COURTESY AMERICAN CHICLE COMPANY

Manufacturers whose products must sell at popular, standardized prices, have to employ packaging machinery that cuts costs to the bone. And yet the wrapping must be highly protective as well as attractive and of utmost convenience to the user.

The Dentyne wrapping machines illustrated above are an excellent example of how our modern machines meet these requirements.

Each unit in this line-up does a complete wrapping job. Gum is fed into the wrapping machines in the form of scored strips. The machine cuts these strips into individual pieces of gum and wraps hundreds of pieces per minute in printed waxed paper, the printing being registered by electric eye. It then assembles the wrapped pieces in groups of six, wraps each group in wax-backed foil, and inserts an easy-opening tape. The end-folds, seam and notch where the tape protrudes, are sealed by liquid wax to keep the gum fresh and tender. Finally, the printed paper band is glued around the package, with the design accurately located by electric eye. Two of our FA machines, located at the end of the line, wrap the cartons in which the gum is packed.



MODEL FA WRAPPING MACHINE

We'll help you lower costs

We'll be glad to make a survey of your present methods and equipment with a view to giving you faster, more economical wrapping—and a better, more attractive package.

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PACKAGE MACHINERY COMPANY

Over a Quarter Billion Packages per day are wrapped on our Machines

Production Forum

By Francis Chilson

Industrial Consultant

Settling Strikes

Every one of you is interested in the current eruption of strikes—you can't help but be. The strikes are going to affect your business, and everything you plan to do this year.

Here's how strikes cause losses to everybody—the public, management, labor and even the unions themselves.

The public loses merchandise of which it is acutely in need. Every little business operated by John Q. Public is affected also from a profit standpoint by strikes in basic industries which keep him from getting necessary raw and construction materials. Strikes may indeed ruin many of his enterprises.

The interests of management are seriously impaired. During a strike, management loses the profit on orders it cannot fill during a strike period. Management loses a good portion of its administrative and selling overhead, which it must sustain even when orders cannot be filled, in order to maintain its organization intact. Management also loses plant overhead for the strike period. Plant overhead cannot be suspended simply because the plant is not operating.

The worker loses his wages for the strike period. Even when a strike for higher wage is won, the worker in a prolonged strike loses money anyway. A strike lasting but a month will cause him to lose 8⅓ per cent of his annual wages. If it lasts for two months, he will lose 16-2/3 per cent of his annual wages.

Even the unions lose money because of strike benefits which they are required to pay.

Therefore, if a way could be found to eliminate strikes without injuring the bargaining position of the worker, a great benefit would be conferred upon everybody.

I would like, therefore, to suggest a plan for settling strikes which, if management could be induced to try it out, should go a long way toward establishing industrial peace. The plan may sound radical to you at first glance, but actually it would operate in the interest of everybody.

The plan provides for settling strikes quickly without loss of wages to workers, or loss of production to the public. This sounds like a large order, and maybe I'm sticking my chin out, but here goes: I propose that management pay time and a half for the strike period on condition that workers continue working during the strike period, and provided further that the strike is settled within thirty days from the date of its formal inception.

In order to get the bonus, workers, under this plan, would be required to agree not to strike again for at least one year after the settlement for any reason whatever.

Under this plan workers would not lose their regular pay for the strike period, but actually would gain a bonus of half time which, in effect, would constitute on an annual basis, a raise in pay of approximately 4 per cent regardless of whether they won the strike or lost it.

Under this plan the public would not suffer the loss of badly needed goods during the strike period.

Since shipments would continue uninterrupted, management would not lose the profit on sales for the strike period, nor would management be compelled to sustain the loss of factory administrative and sales overhead for this period.

When you consider that overhead of the average factory is generally from one to three times its direct labor payroll, and when you realize that during a strike the overhead goes on just the same, it obviously would be to the advantage of the management to pay the strike bonus while negotiations are being conducted—because the bonus would constitute only a small fraction of management's overhead loss that otherwise would ensue.

Under such a plan management, to insure good faith on the part of its employee organizations, would not be required to pay the strike bonus until the end of the year.

I realize that some short-sighted manager might object to this plan on the ground that it might cause annual strikes. I doubt if this would be the case,

THIS IS A COLLECTION OF SAMPLES OF JUST SOME OF THE PRODUCTS PACKAGED BY S&S MACHINES

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This is easy to understand when you remember that, in many cases, it has been S&S improvements that have made the advances in packaging technique — that have made practical many better packages at lower unit costs. Further, it has been S&S developments, like that of the first tight-wrapper, that alone have made possible many new triumphs of modern packaging.

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because if the workers won the strike, there would be no immediate reason to strike again. Moreover, the unions are smart enough to know that repetitive strikes—for no reason other than to gain the strike bonus—would be regarded eventually by the public as racketeering, pure and simple.

Under this plan everybody would gain something. The public would gain badly needed goods; management would save the profit on the sale of this goods and its factory overhead for the strike period; and the workers, even if they lost the major purposes of the strike, would still gain an increases in pay equivalent to a 4 per cent annual pay raise. The unions would save the strike benefit funds they are compelled to pay during prolonged strikes.

Under this plan the strike procedure would be as follows: After a period of negotiation, employee representatives, or unions, having failed to impress management of the justice of their claims, would serve a formal strike notice to begin as of a certain date. From that date work would continue uninterrupted while further negotiations with management were conducted. (These negotiations might, for instance, be conducted by a board representing the public, labor and management.)

If the decision were in favor of management, the workers would still get their strike bonus. If the decision were in favor of the workers, they'd still get the bonus, but in either case it wouldn't be paid until one year after the settlement.

The question arises as to whether a plan, which is predicated on ending a strike within thirty days, would work; because so many strikes have lasted much longer than this period. In such cases, since the workers would lose the half-time bonus if the strikes weren't settled within a thirty-day period, it seems logical to suppose that they would bring pressure on their unions, or representatives, to end the strike within the arbitration period—because they would certainly rather gain something than nothing.

On the other hand this plan, if generally adopted, would exert a certain pressure on management to settle major difficulties, because it would be in the interests of management to avoid the payment of the strike bonus on top of what the workers might be awarded by the arbitration board.

So much publicity is given to strikes that the impression is that strikes are a very common occurrence. It certainly seems so these days, but statistically this is not the case. Workers do not like to strike any more than management likes to have them strike. Even during the present time the percentage of strikers, to the total number of people employed, is very small—about 6 per cent including the steel and auto workers.

If you read the history of the most strike-bound industry of all—the coal mines—during the past twenty-five years, you would find that there haven't been more than four or five major strikes in that period.

The simple fact in labor relations is that workers do not like to strike. They cannot afford the loss of their wages for prolonged periods of time. Management doesn't like strikes, not only because of their disrupting influence, but because they are extremely costly through loss of profits and applied overhead over and above what management is compelled to pay when it loses a strike.

It seems to me, therefore, that a plan which makes it possible for everybody to gain something, however small, is worth a trial.

I'd like your comments.

The German Drug and Cosmetic Industry

You have noticed, according to the papers, that various commissions have been sent to Germany to study the drug industry. These commissions have been composed of scientists and chemical engineers and they have come home loaded down with information concerning German technological progress in the drug industry particularly.

Technologically, the Germans were a smart bunch and in some particulars they had it all over us like a tent. It is a pity that some of the commissions were not composed of practical operating men who could look into the manner in which German drug and cosmetic plants were organized, equipped, laid out and operated. It is undeniable that in some types of automatic equipment they were far superior to us. But you could not expect scientists and chemical engineers to have any appreciation of matters other than those connected with formulation and manufacture. I have always felt a sneaking desire to organize a commission to go to Germany and study not only the drug industry, but the cosmetic industry as well on the view-point of plant arrangement, layout, equipment and operation. In such an endeavor I would have to have several competent assistants. If anyone will finance the trip, I am here volunteering my services.

I should like to name as assistants Howard Sumner of the Norwich Pharmacal Company; Sam Noble of the Chattanooga Medicine Company; Harry Sander of Associated Products, Inc.; John Lemmon of National Drug; C. D. Smith, Jr. "Smitty" of Carroll Dunham Smith; Lord Plushbottom Coughlin of Clark-Cleveland Laboratories; Lou Dietrich of P. Duff and Sons, Inc. I'll think of some more candidates later. I would have to be chairman of the group, of course, in order to keep these guys' minds on their work. To do a thorough job, about five years would be needed for the survey. I don't think that it would cost more than $50,000.00 a year apiece for the members of the commission, plus expenses. Naturally, we would also have to have a look at the drug and cosmetic industry of France, Italy, Bulgaria, Russia, Sweden, Norway, Denmark and Tibet.

Harry Sander would be a particularly useful member of the commission because he understands the German lingo. He used to tell me about a little drug and

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Your D-3 machines were developed especially for handling fine powders, are heavy and rugged, have a variable speed drive that makes quickly available the most efficient operating speeds for making both "slugs" and finished tablets. They are equipped with our patented Excess Pressure Release to prevent possible damage in precompressing operations.

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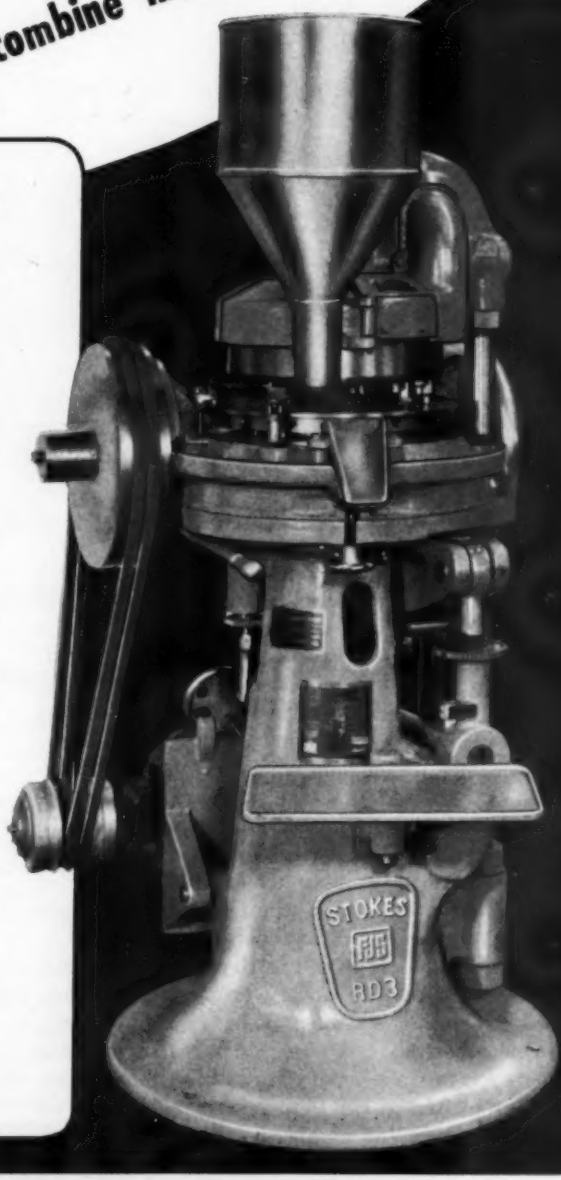

F.J.Stokes TABLET MACHINES PHARMACEUTICAL EQUIPMENT FJS Est. 1895

cosmetic job—or maybe it was just cosmetic—in Obberstrasse-something-or-other in Hamburg where he learned the difference between therapeutic and cosmetic treatment.

Howard Sumner would be taken along because of his knowledge of French. During the last war he studied French rather intensively and was graduated with high honors from L'Ecole de Cosmetique, oo-la-la, 28 Rue Blondelle, Paris, France. He was graduated magna cum laude.

Carroll Dunham Smith, Jr. would be taken along for his knowledge of Swedish. He'd do very well with those Swedish blondes since he's somewhat on the blond side himself and looks a little bit like a Swede in his off moments. Anyway he has that Scandanavian touch and he would do for investigating various matters in Sweden, Norway, Denmark and Finland. He'd get along all right with the Laps also.

John Lemmon would be reserved exclusively for the Russians. He's always rushing something or other and since he was brought up on North Carolina moonshine, it is probable that he would be the only member of the party who could handle Russian Vodka with distinction.

Lord Plushbottom Coughlin, being smooth and rotund and diplomatic, would do very well handling the Bulgarians and the Dhali Llama of Tibet.

Lou Dietrich would be taken along simply to bring us home again—eventually.

Interested manufacturers who are willing to underwrite this undertaking, will please send me some five-figured checks. The organization expenses will be considerable.

Constructive Spending

As a nation, our education for business has been very defective. In our childhood we were taught all kinds of copy-book maxims about saving money. The belief that money was something to be saved was so thoroughly drilled into most of us when we were young that we still are influenced by this hangover of false teaching in our business deals.

If the copy-book maxims were taken literally, there wouldn't be any business. Money is nothing but a medium of exchange, and is not something to be squirreled up in the old blue teapot or in the savings bank. As a medium of exchange, the faster money turns over, within limits, the more business there is for everybody. You can visualize this at the present time by considering the relation of the total volume of money outstanding in relation to the annual volume of business done in this country.

We should throw the old copy books away and begin teaching our children that money is not something to be saved for a "rainy day", but that, on the contrary, it is something to be expended promptly, but wisely.

All through the trade, laboratories and plants are limping along with a lot of antiquated, inefficient equipment which should be sent to the junk pile, simply because the management of so many firms have never learned to spend constructively. It is particularly difficult to persuade management to spend money on intangibles. If, through the use of inefficient equipment, costs are higher than they should be, management generally doesn't worry; because the effect of intangibles is buried in the damnably general thing called "overhead". Management is much more likely to worry about increasing costs when tangible things, such as labor and materials, are concerned.

As an industry, our plants are not anything to be proud of. Many, if not most of them, are inadequately equipped. Very few of them have an appearance which is conducive to a feeling of pride and dignity. Many of the plants in the industry are dirty and disorderly.

Yet I never met a manufacturer, even when he was operating what might be called a hovel, who did not express a desire for an efficient, clean, dignified establishment. But when it comes to paying enough long, green money to secure the proper facilities, management is too often reluctant because of the fear of that "rainy day".

American business men paradoxically always like to have their cake and eat it too.

They wish to enjoy the fruits of research, but seldom are willing to spend the necessary money to cause those fruits to ripen.

They'd like to have proper plant and laboratory facilities, if only they didn't cost so much money.

They'd like to have larger and more profitable business, but seldom are willing to pay the price of getting it.

They'd like to have the best and highest type of executives obtainable, but seldom are willing to pay the price of getting them.

I do not advocate squandering money on anything. I realize that a lot of money is now being poured into research throughout the industry which might as well be poured down the sewer for all the practical results it will achieve. A lot of money has been spent, and is being misspent, on the wrong types of building and equipment.

Every project should be very thoroughly thought out with good judgment and common sense, and then watched carefully as it develops. But, as the old saying goes, "A boy should never be sent to do the work of a man", and by the same token it is foolish to make an expenditure of $20,000.00 on a project, when the project obviously calls for an expenditure of $50,000.00. Likewise, it is foolish economy to hire a five-thousand-dollar man for a ten-thousand-dollar job.

Every business man, and this is particularly true in the drug and cosmetic industry, bets to some extent against the future. An ethical drug manufacturer who builds a streptomycin plant is betting against the possibility that streptomycin will not be made obsolete by some new discovery; just as sulfonamide was made virtually obsolete by the discovery of penicillin. The cosmetic manufacturer who expands

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In writing for Catalog No. 144 give complete information about your liquids, quantities, etc.

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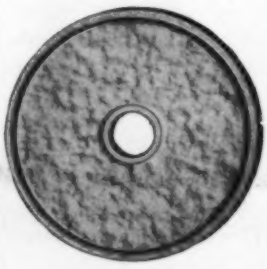

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his facilities is betting on the possibility that the present expansion of the industry will continue. It's this willingness to take constructive chances that has made American business what it is.

The manufacturers who take a pessimistic view, and try to hold on to their money, do an ultimate disservice to themselves, because business cannot thrive unless money is kept in circulation. This circulation must have a certain rapidity or acceleration in order to sustain our economy, just as the blood must circulate through the body at a certain rate of speed in order to maintain a healthy condition.

I think what we all need is to learn how to spend money wisely. This is not an easy task, and it should begin by revising the education of our children to the end—that money may be regarded merely as a tool through the judicious use of which constructive purposes are accomplished.

Ampule Inspection

A couple of months ago I expressed some doubts concerning the practicability of the joint arrangement made by the ADMA and the APMA with the RCA organization to develop an electronic means of inspecting ampules. While it is my nature to welcome every practical, mechanical means that can be used to eliminate manual labor, I'm extremely doubtful that any automatic, mechanical means ever will be developed which will be capable of the infinite adaptability of manual manipulation and human judgment, which enters particularly into the inspection of ampules.

My opinion is that the trade is striving for a perfection which it probably never will attain within our lifetime. It seems a bit foolish to stay awake nights worrying about glass particles in ampules when investigations have shown that the doctors get a lot of glass into ampules when they break them anyway. One of my friends obtained a lot of ampules which had been used in a hospital, and he examined them for glass particles. He found plenty of glass particles in every one. Another friend told me that he'd spent quite a bit of time trying to pull glass particles out of ampules with a hypodermic syringe, and was never successful.

It is possible that the time may come when ampule-making equipment will be standard part of the equipment of every ampule-manufacturing plant, just as it is in the industries which make teeny electronic bulbs—the ear-phone industry, for example.

The dubiousness of the project being worked on by RCA is by implication indicated in Dr. F. B. Fiske's report to the Contact Committee of the American Pharmaceutical Manufacturers' Association. This report is quoted below. Please take note of Dr. Fiske's concluding statement that "A successful piece of examining mechanism is a long way off". I'd like to supplement this opinion by saying that I think it's a helluva long way off!

"A few months ago Mr. Taylor, Mr. Rice, and I visited the RCA laboratories in Indianapolis to view the progress of their work. A number of their scientific staff were present, and a considerable discussion of their problem confronting those to whom the project had been assigned, resulted. I believe they furnished Mr. Taylor with a fairly detailed report on the method they had found most promising for presentation to ADMA Executive Committee.

"We witnessed the demonstration and, because of my lack of knowledge regarding lenses and electricity, my report must be somewhat crude.

"The apparatus was set up with the ampule placed in a chuck that revolved at a sufficient speed to carry the fluid up the sides, leaving an open pencil-like space in the center. With a mechanism the movement was stopped, and as the fluid returned to level, but while still in a state of agitation, a slit of reflected light illuminated the particles as they moved about in the liquid. These reflections interfered with the reflected light rays and resulted in activating a new type tube capable of increasing or stepping up the electronic energy that activated these tubes to somewhere near a million times the original disturbance of electrons, and this results in activating a piece of apparatus that renders these light interferences readable on a scale, the amount of interference showing as peaks on a ruled ground-glass plate, across which the electronic movement appears as a wavy double line, and above which the interferences show as the above mentioned peaks.

"Now as demonstrated, the ampule being examined had to be spun rapidly to insure movement of particles. Then to have a correct reading the eye must read the peak in a very short period. But they explain that once the problem of visualizing the particles is solved and can be recorded as peaks on the apparatus, they can then begin to set up a standard above which a mechanism could be developed that would automatically throw the ampule out. In examination of several ampules three of us, one, Mr. Aiken of RCA, were able to place them in the same order by the light, as they had been placed by visual examination. However, these were 10 cc. ampules and even with these a successful piece of examining mechanism is a long way off."

Please take note of the fact that this mechanism is apparently to be fed by hand. After that the mechanism is to be actuated and stopped so that the peaks can be recorded and the defective ampule kicked out. If this were the sort of apparatus into which a stack of ampules could be dumped and if, further, it would feed itself automatically and kick out the rejects for all and every reason for which ampules are rejected, I'd say that it had some possibility of success. However, it seems to me that as the operator has to pick the ampule up to insert it in a chuck, she could inspect it a damn-sight faster and for many more reasons in a shorter space of time, than the indicated mechanism ever will be capable of. It looks to me like a Rube Goldberg.

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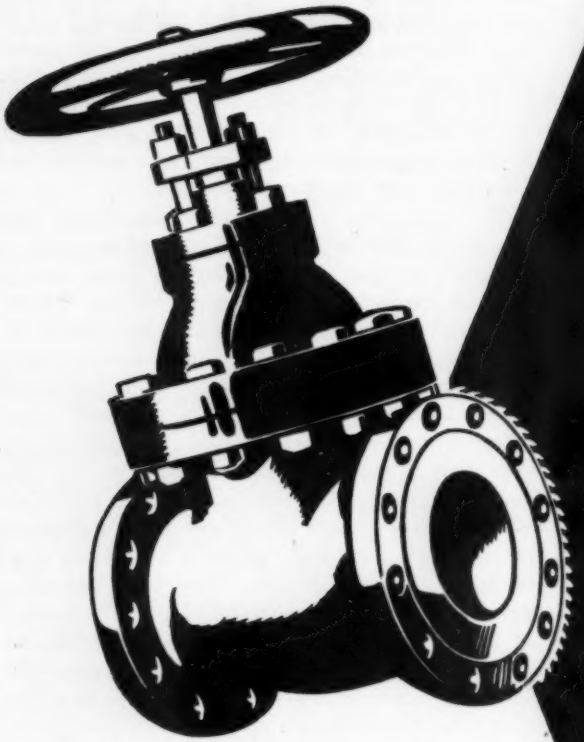

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177-1

The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.

Three New Industrial Pressure Switches

The Aerotec Company of White Plains, N. Y., has developed three new, 8 oz. switches for either pressure or vacuum up to 200 lbs., in the control of liquids or gases that will not corrode brass.

Typical applications are to control compressors, pumps, carbonated beverage equipment. It is rated at 10 amp. on 110-volt ac., is available in three designs. Type M-500 has an externally adjustable range with a fixed differential. Type M-600 can be reset manually from the outside. Type M-700 has an adjustable differential. Contact arrangement in the first two can be specified as normally-closed, normally-open, or double throw. The third design is available only with normally-open contacts. Pressure connection is by means of a 1/8-in. pipe nipple.

New Labeling Machine

Of interest to the packaging industry is the newly developed Vac Spray Labeler manufactured by the Vac Spray Machine Co., of 1701 Olson Boulevard, Minneapolis, Minn.. This versatile labeler will apply labels from the size of a postage stamp up to those five inches in diameter on containers from one quarter ounce to one gallon size at a rate of from 1200 to 3000 per hour. No stoppage of a production line is necessary to make the change-over from one size or shape of label to another or from one size container to another. The change-over can be made in about one minute simply by turning a knob.

The labels may be either gum-backed or of the ungummed variety. They may be foil, varnished, lithographed, or plain. No extra attachments are required in order to handle the different sizes and shapes of labels.

Containers may be glass bottles, metal cans, cardboard boxes, porcelain jars, jugs, flasks, etc. They may be of any shape—round, square, triangle or private mould. No extra attachments are required to handle this wide variety of containers.

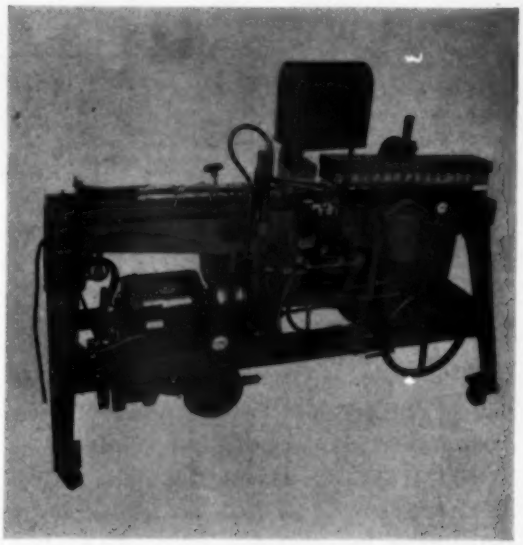
The speed can be varied over a range from 1200 to 3000 containers per hour depending upon the size of the container and the ability of the operator. The change-over from one speed to another can likewise be made in less than one minute.

The Vac Spray Labeler is portable in that it is on casters and can be moved from one part of a plant to another, wherever an electric wall plug is available for power supply.

An ingenious feature is the "magnetic label box" which depends upon the force of gravity of lead weights and inbuilt magnets of the finest magnetic quality available (alnico #5) to hold the labels in place.

Another outstanding feature is the especially patented "multiple wiper" which automatically wipes down the labels and containers. This feature seals the edges of stiff backed, quality labels to the container—a previous problem in the application of quality labels. It also wipes off the excess glue that might appear around the edges of the label on hand application and on most machine applications. This series of five to eight extra wipes saves having one or more people to do this job by hand.

Mr. Burton Toles started the Vac Spray Machine Co. in 1942 with his brother First Lt. William Toles,



U. S. Army Air Corps, who was killed on a mission on December 9, 1943. He states that machines have already been placed in the production lines of many nationally known concerns in the United States and Canada. Sixty day delivery is being offered at present.

With the Vac Spray Labeler the labeling operation is said to be extremely accurate. Adhesive or water is sprayed on the back of the label depending upon whether a gummed or ungummed label is used. The spray can be adjusted for quantity, area, and length of time of spray.

Despite the wide variety of work this labeler will do, it is a comparatively simple mechanism as can be seen from the accompanying picture.

The machine weighs about 1250 pounds. It is 6 feet long, 2 feet wide and 4 feet high. Containers are hand fed to the labeler but are automatically conveyed through the machine to a conveyer belt by the machine itself.

EPPENBACH HOMO-MIXER MAKES DISPERSIONS WITHOUT INCORPORATING AIR

1. Turbine head near bottom of tank starts a converging horizontal flow which carries sedimentary material into close-fitting rotor vanes.
2. Inflowing "slurry" is violently agitated at high velocity and projected upward toward surface.
3. A submerged baffle-plate deflects the rising current horizontally toward sides of tank, thence flowing downward toward bottom.
4. Rapid down-flow submerges and wets out floating material, including additives being fed into the mix.
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6. No surface boil . . . no vortex . . . NO AIR DRAWN IN.

The Eppenbach HOMO-MIXER is built on an entirely new principle. Whereas ordinary mixers create a vortex in the material that pulls in air, the HOMO-MIXER draws only from the bottom of the tank. Entrapped air tends to cause separation and splitting, and frequently oxidizes the product.

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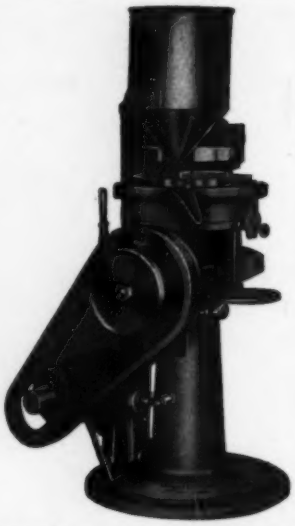

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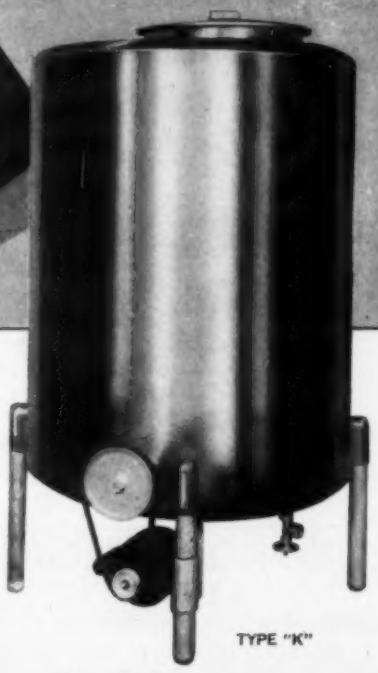

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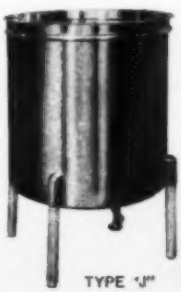

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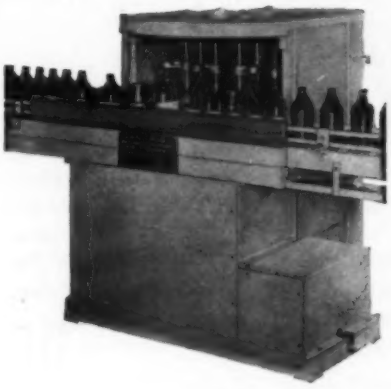

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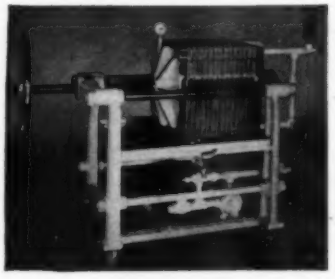

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Sizes from ¾" to 1¾" in diameter and lengths up to 6". Cork, slip-on or screw-cap closures.

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Development of Pharmaceutical Specialties

(*Continued from page 236*)

to prepare and maintain card files which are properly indexed with respect to both subjects and authors. A single file may be assigned to each particular field under investigation. The form of card and the system employed in filing may be arranged to meet the needs of the particular laboratory.

The card file should be supplemented by abstracts or condensates of articles having a direct bearing on the research in progress. Condensates may comprise an analysis of the information presented in a paper from different points of view, the purpose being to enable the research worker to get a clear comprehension of the relationship of the author's work to his own proposed study. Organization of the information gained from the literature survey for a particular field into a single connected review will prove very useful not only while the research work is under way, but also after it has been completed.

Perseverance and thoroughness are necessary to maintain a well-organized, informative, and up-to-date file of the literature in any field. Effort expended in this direction, however, is usually reflected in a better quality of research. It must be stressed that literature study is actually a means to this end, not an end in itself.

(2) *Planning Experimental Program:* Good research work requires a considerable amount of careful planning at the outset. The more time spent in planning the less will be wasted in costly experiments that fail to yield conclusive data. A frequent error on the part of management is to bring pressure on research for immediate results, thus causing experimental work on a broad scale to be started prematurely. It is not intended to infer that no experiments should be started until a comprehensive plan has been outlined or the literature survey completed. On the contrary, it may be highly desirable to conduct preliminary orienting experiments while both these first two steps are in progress, for the results of such experiments may facilitate subsequent planning.

(3) *Carrying out Experimental Program:* There is probably no good substitute for the inspiration and perspiration formula. Every possible variable must be considered and, if necessary, investigated. No deviation from the systematic course outlined should be made unless clearly warranted by the results being obtained.

Assistants should be employed to take care of the more routine functions of the experimental program, thus freeing highly trained personnel to devote more time to study and correlation of data, and the planning of future experiments.

(4) *Clinical Evaluation:* It is hardly conceivable that any reputable company would introduce a pharmaceutical product on the market without previous clinical evaluation. The extent of the clinical evaluation will of course be dependent upon whether the product contains an entirely new drug or whether it contains a drug of known therapeutic action in a new form. In the case of new drugs pharmacological studies may have to precede clinical studies. Large companies will generally have the facilities for carrying out the former; small companies may have to have such work conducted by outside laboratories. Clinical studies will invariably be carried out at a hospital under the direction of a qualified clinician. Companies should establish contacts with several hospitals to facilitate the handling of clinical evaluation studies. If possible a physician should be employed full time to take charge of this phase of the work. If desirable patient acceptance tests can generally be conducted simultaneously with the clinical evaluation studies.

(5) *Pilot Plant Studies:* Large scale manufacture of a new product should seldom be undertaken without trials first on a small scale, larger however than laboratory scale. The purpose of this is to determine whether problems are likely to be encountered in commercial production that were not apparent in the laboratory. Variables in the manufacturing process can sometimes be studied better on a pilot plant scale than on a laboratory scale, but where this does not hold true the studies should be carried out in the laboratory to keep costs at a minimum.

For small companies the pilot plant may form part of the research department, but in large companies it may be better to have the pilot plant as a separate unit. Obviously, in such cases a close liaison between the research department and the pilot plant should be maintained. When a product is produced on a pilot plant scale it is usually possible to get a more accurate estimate of the cost of manufacture.

Clinical evaluation tests may await the pilot plant trials when a larger quantity of the product can be made available for distribution.

Research Conferences

Research work can be frequently expedited by holding periodic meetings at which mutual problems are discussed. When the research staff is small all members may profit by attendance at such meetings. With large companies on the other hand the presence

(*Continued on page 283*)

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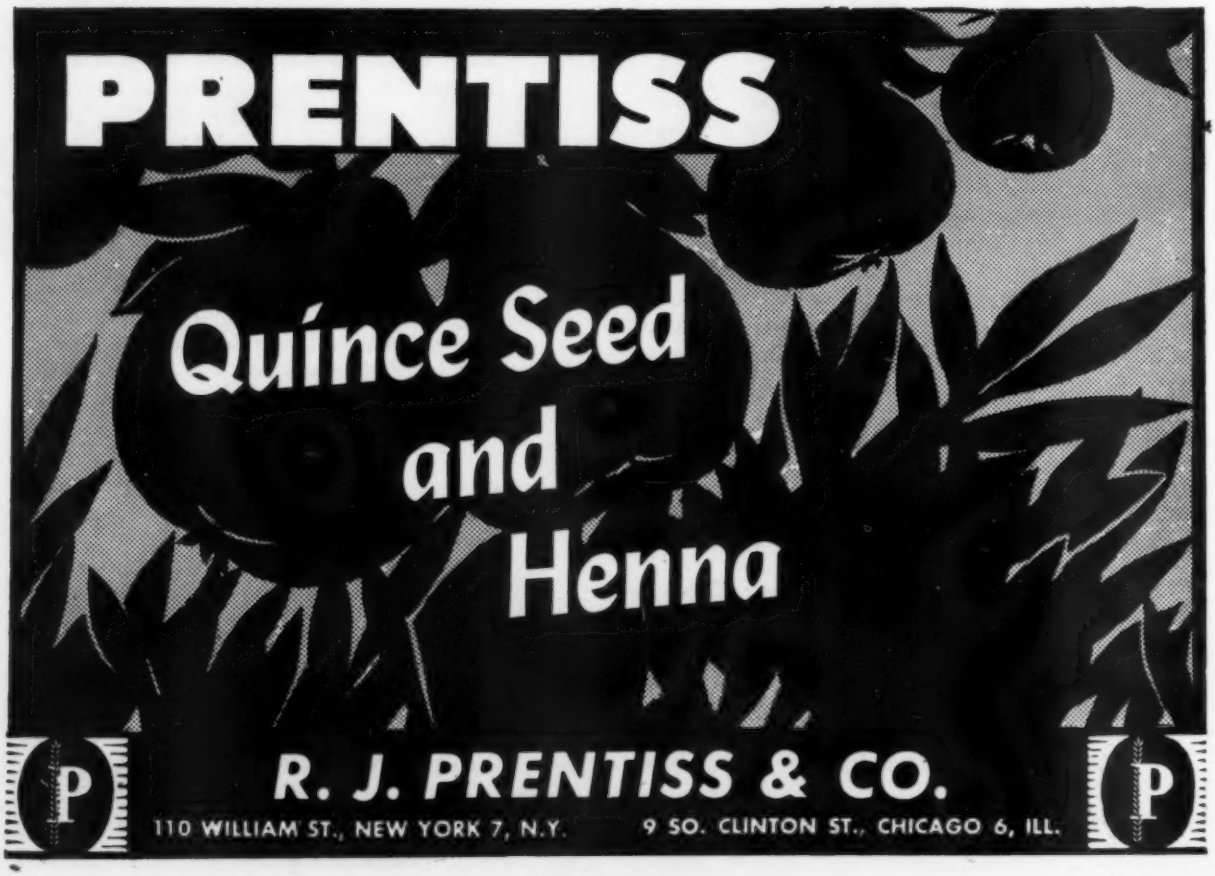

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Scent Fixative from Plant Source

A new and novel scent fixative from plant sources is described by M. Sandoz in U. S. Patent 2,383,517 as being inexpensive and readily available. According to the specifications, this new scent fixative is obtained by treating the leafy portion (and fruit) of *Myrica asplenifolia* with a solvent like petroleum ether and removing the solvent from the solution to obtain a yellow waxy solid, which is termed an "oleo resin." This solid, with a melting point of 47° C., is soluble in ethyl alcohol, olive oil and peanut oil, difficultly soluble in mineral oils, and insoluble in water. It has a pleasing odor; its scent harmonizing with the other constituents and permitting the odor of the other constituents to predominate. As an example of its utility, the following formula is given:

Alcohol	**969.0 parts**
Lavender	**20.0 parts**
Bergamot	**10.0 parts**
Fixative	**1.0 part**

Refractive Dispersion in Essential Oil Analysis

Considerable use is made of measurement of refractive dispersion in mineral oil analyses, particularly in the determination of mixtures of hydro carbons. Recent investigations made by Y. R. Naves (*Manuf. Chem. & Manuf. Perf.* 16:429, 1945) have demonstrated the great scope of dispersion measurements in the analysis of essential oils such as jasmin, lovage and pennyroyal. Such a simple measurement, carried out in a few minutes and supplementing the measurement of refractive index for the sodium D line, has been almost entirely neglected for a long time.

For general technical application the refractive dispersion between the α and β lines of hydrogen is worthy of consideration. These are the C and F lines of Frauenbofer, the wave lengths of which (6,563 and 4,861A) are in the range of those of the yellow doublet of sodium (*i.e.*, the D line).

The luminous spectra can be produced by means of a Geissler tube and the dispersion may be directly measured with a crossed prism goniometer, an ordinary or autocollimator, a Pulfrich refracto meter, etc. Such apparatus, of sound construction, permit of measurements to an accuracy of ± 0.00002. This goes far beyond what is required in technical laboratories, where the commonly used instruments of Fery and Abbe are sufficiently accurate.

The formulas employed and methods for calculating the values are considered briefly but adequately. It is pointed out that the specific dispersion is substantially constant for a given class of products. Upon this fact were founded the first attempts at application to technical analysis of mineral oil fractions. The method has been applied to binary, ternary and even quartenary mixtures.

With the aid of a suitable expression, it is possible to determine the total proportions of homologous bodies comprising one out of the two, three or four series of substances in essential oils. It is important in this connection to consider the structural factors influencing the specific dispersion of the constituents of essential oils. In the first place these are the ethylenic bonds and their situation relative to various groups (aromatics, carbonylic, carboxylic). Other structural features are of secondary importance. The nature and distribution of the structural factors define the series.

Values for particular compounds fluctuate more or less widely round the mean values according to the relative importance of the aromatic and aliphatic parts of the structure. A larger number of measurements will result in revision of the mean values.

Practical application of the method has already indicated its potential value. With the aid of the dispersion, workers have approximately estimated the proportion of benzyl benzoate in jasmin oil fractions still containing a substantial proportion of sesquiterpene alcohols and their esters. Naves has also shown that the refractive dispersion is valuable in studying the lactone fraction of a lovage oil composed of a mixture of phthalides and hydrophthalides. One of the most fruitful applications of the method so far described by this investigator was in the analysis of pennyroyal oil. Dispersion measurements on this oil support the interpretation of the composition already deduced with some measure of certainty from density and refraction measurements either on the whole oil or on its distilled fractions.

Naves emphasizes that the method deals with a measurement complementary to that of the refractive index and that without using any additional material and with only a little additional work, it is possible to obtain further insight into the nature of an essential oil.

Crotonic Acid and its Derivatives

The patent literature of the last fifteen years contains many references to crotonic acid and its derivatives, but up to recently the high cost and small quantities available have limited the potential applications of these materials. According to a note in the *Manufacturing Chemist and Manufacturing Perfumer* (16:444, 1945) this situation is to be remedied because a pilot plant to make crotonic acid is being set up in Canada by Shawinigan Chemicals Ltd.

Preliminary studies suggest that crotonic acid and its immediate derivatives may be useful in the preparation of coatings, pharmaceuticals, perfumes, insecticides, fungicides, plastics, bonding compositions, synthetic elastomers and many other specialty chemical products for which organic intermediates are necessary. Many of these applications, however, still require considerable research before they are ready for commercial development. Perfume manufacturers will be interested especially in *iso*butenyl crotonate, geranyl crotonate and other esters which have been suggested for use as perfumery solvents.

Some Essential Oils of Provence

Considerable new and interesting information on the properties and constituents of essential oils of some Labiatae (Menthaceae) of Provence, reported by R. Salgues (*Rev. gen. sci.* 52:35, 1942), has been made available recently through *Chemical Abstracts* (39:5398, 1945). Noteworthy is the data presented on oils obtained from the *Stachys* species, a group of widely distributed herbs of the mint family, more commonly known as woundwort. The composition of two essential oils, from *Stachys recta* and *Stachys sylvatica*, respectively, have been determined as follows:

	S. recta	*S. sylvatica*
Yield	0.31%	0.27%
Specific gravity	0.8930	0.9160
Specific rotation	−6°30′	−5°
Index of refraction	1.4660	1.4725
Geraniol	17.54	16.20
Linalool	11.44	19.76
Citronellol	0.68	0.30
Total alcohols	29.64	36.26
Citronellal	0.82	1.17
Citral	Traces	0.26
Total aldehydes	0.82	1.43
Ethers	18.20	10.15

The differences in the composition of essential oil of serpolet (wild thyme), *Thymus serpyllum* Linne were investigated with respect to type and stage of development. Thus, the mountain type, with colored flowers, were studied at the middle of development (A) and at flowering, (B); the following data being obtained:

	A	*B*
Yield	5.28%	5.15%
Specific gravity	0.9060	0.9074
Specific rotation	−2°40′	−2°44′
Index of refraction	1.4478	1.4864
Boiling point	344°C.	343°C.
Carvacrol	54.70	55.20
Thymol	3.80	3.60
Total phenols	58.50	58.80
Borneol	2.64	2.29

The field type, with flowers of less color, were also studied with regard to the essential oil components; the oils being obtained at the middle of development (A) and at flowering (B):

	A	*B*
Yield	5.43%	4.10%
Specific gravity	0.9028	0.9026
Specific rotation	−2°46′	−2°30′
Index of refraction	1.4926	1.4862
Boiling point	347°C.	350°C.
Carvacrol	55.10	54.70
Thymol	2.80	3.10
Total phenols	57.90	57.80
Borneol	1.67	1.34

Data for oil of serpolet obtained from colorless (Albiflores) plants, under the same stages of development are as follows:

	A	*B*
Yield	4.30%	4.26%
Specific gravity	0.9090	0.9064
Specific rotation	−2°30′	−2°40′
Index of refraction	1,4852	1.4754
Boiling point	347°C.	351°C.
Carvacrol	52.60	53.10
Thymol	2.30	2.90
Total phenol	54.90	56.00
Borneol	2.15	2.10

The yield of oil was markedly decreased and the physical characteristics noticeably affected by infestation by *Puccinia coulincola* at all stages of plant growth. Accordingly to Salgues, the maximum amount of essential oil is obtained at the middle of development for both mountain and plain types.

Determination of the properties and composition of essential oils of wild and cultivated marjoram, *Origanum vulgare*, clearly revealed the influences of agricultural care and the type of soil in which the plants grew. Thus oils from wild (A) and cultivated (B) plants grown on calcoreous earth displayed the following differences in composition:

	A	*B*
Yield	2.17%	2.79%
Phenols	83.40	89.44
Thymol	18.86	23.47
Carvacrol	64.54	65.97

Similar average comparisons of essential oils from wild (A) and cultivated (B) marjoram, in siliceous earth, were as follows:

	A	*B*
Yield	1.91%	2.71%
Phenols	76.60	87.57
Thymol	18.94	23.71
Carvacrol	60.65	63.86

The average composition of mint-balm (Melissa oil), *Melissa officinalis*, under normal conditions, was determined at various stages of growth, e.g. toward fullness of development (A), at half development (B), and at flowering (C), as follows:

	A	*B*	*C*
Yield	0.41%	0.86%	1.00%
Specific gravity	0.9062	0.8957	0.8942
Specific rotation	0°31′	0°32′	0°34′
Index of refraction	1.504	1.498	1.497
Geraniol	19.84	16.12	12.38
Linalool	12.16	13.50	14.21
Citronellol	6.17	7.15	8.23
Total alcohols	38.17	36.77	34.82
Citronellal	3.15	3.38	3.90
Citral	0.88	0.94	0.96
Total aldehydes	4.03	4.32	4.86

Salgues notes that there is a marked decrease of the oil in plants infested with *Phleospora melissae* (Desm.) Paris.

Expansion of Palestine Essential Oil Industry

Having been stationed with the British Army in Palestine, E. Hardy had an opportunity to observe at first-hand the wartime development of the essential oil industry in that country. According to his report in the *Manufacturing Chemist and Manufacturing Perfumer* (16:277, 1945), the Palestinian essential oil industry has expanded out of the need to utilize surplus stocks of citrus fruits when shipping restrictions limited export. The result has been thtt the essential oils produced and sold to America and England during the war have actually produced more profit than would the fruit had it been exported to its original market.

The surplus fruit crop is first utilised for the expression of oil, then for obtaining fruit juices, and the pulp is finally converted into cattle fodder. New orange groves have been provided with small hand machines to express the oil, and the village communities sell the oil to co-operative central pools. From here the oil is shipped in crude form to England and the U.S.A. There is, however, a small essential oil refinery at Haifa, where both oranges and lemons are utilized; but the lemon oil has the higher export value.

Oil is also being extracted from wild herbs, thyme and the origan herb.

Mint Oil Production for 1945

A note in the *Chemurgic Digest* (4: 365, 1945), citing *Northwestern Farm News*, points out that mint oil production for 1945 is indicated at 1,915,000 pounds—32 per cent more than the revised estimate of 1,454,000 pounds for 1944 and 65 per cent above the 10-year (1934-43) average of 1,163,000 pounds. The indicated crop sets a new record, with both acreage and yield per acre at new high levels.

Peppermint is expected to account for 1,603,000 pounds and spearmint for 312,000 pounds, or 84 and 16 per cent, respectively, of the total. Compared with 1944, indicated peppermint oil production is up 31 per cent, and spearmint oil is 37 per cent greater. Both crops are much above average—peppermint, 61 per cent and spearmint 89 per cent.

Conditions in Indiana and Michigan, where more than three-fourths of the acreage of mint grown for oil is located, have been favorable. In the west, a better-than-average yield is indicated for Oregon, although it is considerably lower than 1944, while the Washington yield is expected to be slightly above 1944, but moderately below average. Hot, dry weather and insects in these states have affected the crop adversely.

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U. S. P. Melting Point Standards

Although the melting point of an organic compound is a universal and fundamental criterion for identifying and determining the purity of that compound, discrepancies sometimes arise because of differences of technic, interpretation of findings and other factors. Recognizing these difficulties, The U. S. P. Revision Committee has set out to establish melting point reference standards by which the correctness of a procedure or apparatus could be checked. To this end, the Committee obtained chemicals whose melting point ranged between 80° C. and 237° C., thus covering practically the entire range of U.S.P. chemicals. These substances were submitted to various laboratories, and it was found that about 95 per cent of the data reported were in good agreement. The chemicals selected for such standardization, and also their melting ranges, are as follows:

	Melting Range (° C.)
Vanillin	81-83
Acetanilid	114-116
Acetophenetidin	134-136
Sulfanilamide	164.5-166.5
Sulfapyridine	190-193
Caffeine	235-237.5

A set of these melting-point reference standards is available from the Chairman of the U.S.P. Revision Committee.

German Patent on Emulsions

In the trickle of patents now coming from Germany, there occasionally appears an item of interest to drug and cosmetic producers. Thus, in German Patent 739,595, granted to F. Giloy, methods are given for making stable water-in-oil emulsions. According to the claims, cosmetic or pharmaceutical cream- or salve-like emulsions may be made from paraffin oil or liquid petrolatum by emulsifying them with water with the aid of bleached (oxidized) montan wax and hardened vegetable oil.

Vitamin B Complex Syrup

An item in the *Bulletin of the American Society of Hospital Pharmacists* (2:79, 1945) provides the following formula for a syrup of vitamin B complex:

Thiamine chloride	1.250 Gm.
Riboflavin	0.250 Gm.
Pyridoxine hydrochloride	0.075 Gm.
Calcium pantothenate	0.200 Gm.
Nicotinic acid	5.000 Gm.
Distilled water	200.000 cc.
Syrup of cherry, to make	500.000 cc.

Dissolve the nicotinic acid and riboflavin in water with the aid of heat, add the other ingredients and filter. The average daily protective dose of this syrup for infants is 0.25 cc.

Brittle Nails: Causes and Treatment

In a brief discussion of the ethiology and treatment of onychorrhexis or brittle nails, appearing in MODERN MEDICINE *(13:231, Dec. 1945) it is pointed out that the condition appears to have no single specific causes. Among the influences conducing to brittle fingernails are heredity, senility, anemia, avitaminosis and skin diseases such as eczema, psoriasis, lichen planus and onychomycosis. Excessive contact of the hands with solutions containing soap and other alkalis, with formaldehyde and with the esters, solvents and lacquers used in industry, dries the nails and causes brittleness. Onychorrhexis also occurs in healthy individuals, as an isolated phenomenon in the absence of any local or systemic disease. The occupation most damaging to the nails is that of housewife. Constant use of soap and water and other alkalis, low humidity in overheated rooms, endocrine disorders, nail polish and polish removers (acetone), laundering and the treatment of clothing with cleaning fluid are possible causative factors.*

When it is possible to discover a connection between brittleness of nails and any disease, practice or occupation, good results may follow appropriate treatment. If iron metabolism is at fault, brittle nails and more pronounced nail changes such as koilonychia may be corrected by proper iron medication. If the patient is employed in industry, the dehydrating effects of esters, solvents and lacquers containing acetone, ethyl acetate, butyl acetate and methyl cellosolve must be considered. Such solvents remove both fat and water, but the dehydrating effect is the most important because of the small amount of fat and the relatively large amount of water in nails.

When there is no disease and no industrial occupational hazard, maintenance of good nutrition with enough vitamins, minerals, water and hormones is obviously necessary. The following cream is recommended for local application.

℞ **Triethanolamine**	2.0
White petrolatum	1.5
White wax	0.5
Anhydrous wool fat	0.5
Water	15.0

This cream is to be applied at night, and during the day if possible.

Sulfa Hair Lotion

A lotion containing sulfanilamide which has been used successfully in dissolving dandruff and preventing hair from falling out is described by J. C. Rommell in the *Medical Record* (158:-478, 1945) as consisting of:

Sulfanilamide	60 grains
Fluidextract of thyme	6 dr.
Glycerine	6 dr.
Bay rum	8 oz.
Water, to make	16 oz.

Dissolve the sulfanilamide in boiling water and then add the fluidextract, glycerine and bay rum. The lotion should be applied once or twice daily, rubbing well into the scalp. The preparation is said to be particularly effective with young persons.

IN RESINS! Glycerine is an important component in the making of alkyd resins, used for automotive finishes and for finishes on refrigerators, stoves, and other home appliances, because it is efficient and high-boiling, and offers complete availability of all three of its hydroxyl groups. Pictured above is a depth gauge used to measure the thickness of paint.

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Anti-Dandruff and Related Preparations

A rather comprehensive review of anti-dandruff lotions and other hair and scalp preparations is presented by K. N. Richardson in *Soap, Perfumery and Cosmetics* (18: 964, 1945). Following a consideration of the several views and theories concerning the causes of dandruff, he discusses the value and function of the active agents used in anti-dandruff preparations. Citing Marsek, it is remarked that sulphur plays a most important part in the medication. In most cases, the application of a sulphur-containing preparation will afford relief or assist in bringing about an improvement, provided, of course, the condition is at all responsive to external treatment. The preferable variety of sulphur to be used is the precipitated, although the so-called washed sulphur may serve in its place.

In addition to sulphur, resorcinol may be used, thus materially increasing the efficacy of the preparation. However, in case of certain idiosyncracies, resorcinol may produce very undesirable effects, a factor which suggests the use of salicyclic acid in preference. Both resorcinol and salicylic acid act as a stimulant and as an anti-parasitic application. The use of either of the two products may produce a scaling of the scalp. If such scaling is accompanied by a highly inflammatory condition, the use of the preparation must be discontinued at once, but the mere scaling, if not excessive, will benefit rather than harm.

Another product which is frequently recommended and which can be used advantageously in commercial preparations, is pilocarpine. The active constituent of Jaborandi leaves, a tincture of which is occasionally used for hair tonics, pilocarpine, is used either in the form of the hydrochloride or the nitrate. Its action is essentially that of an irritant.

In his notes on formulation, Richardson emphasizes that the following formulae, gleaned from the literature in most cases, call for expert revision and modification prior to adoption for commercial use. Several examples of anti-dandruff preparations are given; the following being a typical formula:

Precipitated Sulphur	3.3
Salicylic Acid	1.0
White Wax	6.7
Hydrous Wool Fat	33.3
Petroleum jelly, to make	100.0

The following anti-dandruff preparations are said to have been used at the New York Skin and Cancer Hospital. The first, an ointment, consists simply of:

Resorcinol	4.0
Petroleum jelly, to make	100.0

The second, a lotion, is made from:

Resorcinol	6.0
Glycerine	10.0
Alcohol	9.6
Water, to make	100.0

It should be noted that although resorcinol has no appreciable effect on dark hair, this drug will stain blond, grey or white hair. Euresol (acetylresorcinol), is less apt to discolor the hair, and may be used in the place of resorcinol in equal amounts. Euresol is soluble in alcohol and in acetone, but not in water. It is readily miscible with the various ointment vehicles. A much-used Euresol combination, mentioned by Bliss, contains:

Euresol	3.3
Alcohol (95%)	56.0
Distilled water, to make	100.0

Various additions may be made to such combinations, as in Sympson's lotion, given as follows:

Tincture of cantharides	1
Dilute acetic acid	1
Spirit of rosemary	2
Glycerin	1
Rosewater, to	16

The following provides an example of a general hair tonic:

	per cent
Liquid ammonia	6.0
Olive or castor oil	4.0
Balsam Peru	0.5
Vitamin F	1.5
Wool Wax Alcohols	0.5
Salicylic Acid	1.5
Tincture of benzoin	2.0
Water, distilled	46.0
Alcohol	38.0

Richardson feels that one can recommend the anti-dandruff shampoo devised by Kinnear:

	per cent
Oil of cade	2.0
Thymol	1.0
Green soap	33.0
Denatured alcohol, to make	100.0

This shampoo should be rubbed well into the scalp without any previous mixing with water or wetting of the hair, left for five minutes, and then rinsed off.

In discussing baldness, the causes for this condition are given as follows: firstly, a natural decrease in the activity of the vital organs due to old age or over-exertion; secondly, their improper functioning due to diseases of the body in general; thirdly, nervous conditions brought about through shock, mental strain, worry, etc., and fourth diseases of the hair or scalp.

Baldness or other ill conditions of the hair or scalp due to the first of the four causes cannot respond to external treatment although in some cases the life of the hair may be prolonged to a certain extent. In cases where conditions as mentioned in the second and third group prevail, the elimination of the underlying cause will usually suffice to bring about the resumption of the processes propagating the replacement of the discarded hairs. External treatment alone will never produce the desired results, although it may assist in the restoration of normal functioning.

Within the fourth group, however, come those conditions which will altogether or partially respond to the remedial action of external applications.

A preparation of the older type, for use in cases of falling hair, is illustrated by Bartholomew's formula:

(9) **Liquid extract of jaborandi**	2
Tincture cantharides	1
Soap liniment	5

More "modern" types of preparation devised to reduce the incidence of baldness and minimize the premature falling out of hair are those based on nutrients such as cholesterol, etc. Two typical formulas taken for Lower's recent paper on wool wax alcohols are quoted as illustrative examples of such products:

Glyceryl monostearate	12.0
Wool wax cholesterol	1.5
Lanolin	1.5
Lecithin	1.0
Triethanolamine stearate	8.0
Castor oil	3.0
Water	73.0

Wool wax cholesterol	0.4
"Vitamin F"	1.0
Lanolin	2.0
Lanette Wax SX	9.0
Lecithin	0.2
Avocado oil	3.5
Cetyl alcohol	3.0
Lactic acid	1.0
Water	78.5

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HAIR AND SCALP PREPARATIONS: Isopropyl Alcohol as a vehicle for hair and scalp preparations aids the cleansing and antiseptic value of the tonics.

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ADVANCING THERAPY

Frozen Plasma

According to V. I. Kasanski in the *American Review of Soviet Medicine* (2:207, 1945) a blood substitute equal to fresh plasma is provided by thawing plasma which has been frozen in partially filled containers and stored at -15 to -25° C. Freezing, storing and thawing cause no irreversible physiochemical prbtein changes. The thawed plasma is nontoxic and may be used in the same manner and in the same amounts as fresh plasma. The hematological indications for transfusion, it is stated, are identical. The frozen plasma is thawed and warmed to 38° C. by placing the container unopened in a water bath with a constant temperature of 38 to 40° C. Flocculation which may develop during the thawing process usually disappears upon further warming; filtration is occasionally necessary.

Fluorine in Water and Dental Caries

Under the military restrictions imposed in a War Relocation Center, H. Klein (*Public Health Reports* 60:1462, 1945) was able to make a controlled study of the effects of fluorine in drinking water on the occurrence of dental caries in children. As a result of comparisons made over a two-year interval, it appears evident that a fluorine content of 3 parts per million in the drinking water is associated with a marked reduction in new caries in teeth. While Klein's findings are not intended to constitute an endorsement for adding as much as 3 p.p.m. of fluorine to community water supplies for the purpose of reducing the incidence of dental caries, the data assembled by him does provide information showing that the addition of small amounts of fluorine to water supplies deficient in this element results in a reduction in the occurrence of caries in the permanent teeth of school-age children; such caries inhibition being most evident in the teeth of younger children.

Petit Mal Epilepsies Treated with Tridione

In the experience of W. G. Lennox (*J.A.M.A.* 129:1069, 1945), the new drug, tridione, has given the "most dramatic" effects of any form of therapy attempted for the treatment petit mal epilepsies, which occur most frequently in children. The drug, described chemically as 3,5,5-trimethyloxazolidine-2, 4-dione, has not as yet been placed on the market, and it is felt that final evaluation of the therapeutic and side-effects of the drug must await a wider and longer experience.

The new drug was given to a group of 50 patients subject to frequent daily petit mal or similar seizures. In a period of days to weeks the offending seizure ceased in 28 per cent, were reduced to less than one fourth of the usual number in 52 per cent, and were little affected in 20 per cent. In several patients seizures once stopped did not return when medication was discontinued. From the case reports presented, it is apparent that, in addition to its beneficial effect on the seizures, tridione administration also resulted in better appetite, gain in weight and in improvement in school performance or deportment in children.

Unpleasant side-effects of tridione therapy have been various. In several cases skin rashes caused discontinuance. Gastric disturbance has not been prominent, nor has drowsiness. A more difficult and surprising side-effect has been an unusual sensitivity of the eyes to bright daylight. This was noted by the majority of adolescent or adult patients but only by young children, although children received much larger doses per pound of weight. The symptom has not been attended by any decrease in visual acuity when indoors or alteration in the appearance of the retina or other structures of the eye. Continued use of the medicine has not caused progressive increase of photophobia, which disappears a week or ten days after the medicine is stopped.

Penicillin in Relapsing Fever

If untreated or inadequately treated, the morbidity in relapsing fever is great. In addition to from two to six or more severe febrile episodes over a month or more, the victim of the disease faces a long period of mental depression, musuclar weakness, headache and backache. Since the administration of arsenicals, with or without bismuth, proved inadequate in controlling the disease and its debilitating effects, W. C. Taft and J. B. Pike (*J.A.M.A.* 129:1002, 1945) decided to try penicillin. Administrated in a dosage of 2,400,000 units, penicillin proved effective in the treatment of relapsing fever. In two instances, it produced a rapid subsidence of symptoms and signs, prevented subsequent relapses and eliminated the protracted convalescence characteristic of patients otherwise treated.

Chlorophyll-Urea Ointment for Burns

By applying an ointment containing 1 per cent chlorophyll, 10 per cent benzocaine and 32.2 per cent urea, report M. D. Finkel and A. J. Levine (*Indust. Med.* 14:730, 1945), the healing time of burns is shortened by at least 50 per cent. New epithelial tissue developed and matured rapidly with the formation of skin that was smooth and flexible. The burns, of varying degree, were produced by hot metals, hot fats and steam or were of electrical origin. Indolent ulcers and wounds resulting from traumatic or operative loss of epithelial tissue also were benefited by the ointment. Secondary infection of clean wounds or burns did not occur and sensitivity to chlorophyll was not encountered. Several long-standing cases, with infection at the beginning of treatment healed quickly and with minimal or no scar tissue formation.

Penicillin in Treating Tetanus

Tetanus is an extremely serious disease, whose mortality rate remains extremely high in spite of the institution of heroic measures for combating the intoxication and controlling the convulsive seizures that it produces. Often, even with the best of treatment, failure results. Hence the importance of the paper by L. Weinstein and C. Wesselhoeft (*New England J. Med.* 233:681, 1945) on the use of penicillin in treating tetanus. Two cases of severe tetanus are reported in which recovery followed treatment with large amounts of antitoxin, surgical excision of the wounds and administration of large doses of penicillin.

The favorable results obtained in these cases indicate that penicillin is a valuable adjuvant in the treatment of tetanus. However, it is stressed that the administration of large quantities of antitoxin and careful control of convulsions, as well as the maintenance of a good nutritive state and fluid balance, cannot be replaced by any antibacterial agent, regardless of its potency. The use of penicillin in tetanus appears to be most valuable in cases in which multiple lesions not all of which can be removed by surgical means are present or in which no focus of infection is detectable.

Benadryl for Allergic Symptom Relief

A new drug, called "benadryl," offers promise of relief to many sufferers from hay fever and from dermatological manifestations of allergy, according to several reports in the medical literature. Chemically identified as beta dimethylaminoethyl benzhydryl ether hydrochloride, the new drug appears to act through an antihistamine effect. Considerable information on benadryl has been made available in a symposium appearing in the *Proceedings of the Staff Meetings of the Mayo Clinic* (20: 417, 1945). Here it is reported that excellent results were obtained with benadryl in the treatment of cases of hay fever of the typical seasonal variety characterized by rhinorrhea, nasal congestion, sneezing and itching. In 21 of the 22 cases treated, at least 50 per cent relief was obtained, while in 19 of these 22 cases, 75 per cent or more relief was provided by the drug.

The drug was also very effective in relieving symptoms resulting from drug sensitivity such as reactions to penicillin injections and allergy, to barbiturates. Marked success was obtained in the treatment of chronic and acute urticaria, according to other workers reporting in this symposium.

The value of benadryl in the treatment of urticaria and related dermatoses is corroborated in two other reports. Writing in *Archives of Dermatology and Syphilology* (52:239, 1945) A. C. Curtis and B. B. Owens state that 11 out of 18 patients given benadryl experienced prompt relief of symptoms as long as the drug was taken. Three had definite and real improvement. In the same issue of this Journal (p. 243), L. W. Shaffer and his associates report on the favorable therapeutic effect of the drug in 7 of 8 cases of urticaria.

It is recognized, however, that benadryl is a palliative only. Symptoms of hay fever, chronic urticaria, angioneurotic edema and dermagraphia recur promptly when the drug is discontinued. Since determination of the cause and subsequent cure of the allergic disorders is often impossible or at best is a long and painstaking procedure under present methods, it is felt that this drug is of value because of the symptomatic relief it offers to many patients. Although benadryl appears to have a wide margin of safety, certain undesired side-effects appear with significant frequency. These include sleepiness, dizziness and a dryness in the mouth. However, these symptoms disappear promptly when the drug is discontinued.

Histamine for Vasomotor Rhinitis

W. P. E. Paterson (*Canadian M. A. J.* 52:400, 1945) has noted a definite increase in the number of cases of vasomotor rhinitis; this being attributed to the increase in stress and strain from worries and frustrations of the times. He has found that the use of histamine diphosphate gives good results in many of these cases, especially in those which are influenced by the weather. He believes that histamine is definitely one of the drugs to be tried in the treatment of this condition. Large doses of nicotinic acid are also being used with good results in some cases. Doses of 50 mg. four times a day are usually used. If the patient complains of flushes and light-headedness with the large doses, treatment is usually stopped temporarily. The type of treatment is determined by the patient's mental state, glandular functioning and possible allergic tendency.

PABA vs Spotted Fever

Para-aminobenzoic acid (PABA), a member of the vitamin B complex, has been found useful in the treatment of typhus fever. The suggestion that this agent may also be of value in the treatment of rickettsial disease other than typhus prompted H. M. Rose, R. B. Duane and E. E. Fischel (*J.A.M.A.* 129 1160, 1945) to try PABA on a patient with a positive diagnosis of Rocky Mountain spotted fever. Since this disease is sometimes fatal, often severe, and usually pursues a febrile course for at least ten days, it is of significance that the administration of para-aminobenzoic acid in amounts sufficient to give high blood levels was closely followed by a precipitous drop in temperature and a rapid disappearance of other signs and symptoms. Although it cannot be concluded from a single case that these beneficial effects were directly attributable to the drug, their relationship suggests that this was the case. The authors feel that further trials of this agent will doubtless be forthcoming from areas in which spotted fever is more prevalent.

Sulfathiazole in Impetigo

The efficacy of sulfathiazole suspensions in treating impetigo contagiosa is indicated in an analysis made by MacKenna and Cooper-Willis (*Lancet* 2:357, 1945). Over 1,000 uncomplicated cases of this skin disease were treated in a military hospital in three different ways: (a) microcrystalline sulfathiazole in 15 per cent suspension; (b) ordinary sulfathiazole in 15 per cent suspension, and (c) copper and zinc sulfate lotion. A study of the results obtained indicated that sulfathiazole in either form was significantly better than treatment with the lotion. Moreover, the length of hospitalization was also appreciably shortened. The suspensions of sulfathiazole, applied twice daily were made from:

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Tragacanth	**4 " "**
Physiological saline, to make	**100 " "**

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PURCHASING DEPARTMENT

Increase in Drug Imports Expected; Spot Menthol Declines on Weak Statistical Position; Tartrates Drop

With the gradual return of shipping to peacetime cargoes, the drug industry, it is expected, will soon be able to rebuild depleted raw materials stocks. Such necessities as quinidine, colchicine, emetine hydrochloride, caffeine, strychnine, brucine sulfate, and menthol are arriving from Brazil, Holland, Switzerland, and Canada. A shipment of 45,000 ounces of quinidine alkaloid crystals left Holland for New York late in November. Additional shipments were scheduled to leave during December.

The Far East, of course, is out of the picture for the present, and will remain so until internal difficulties are settled.

Vitamin A Short

Vitamin A continues in short supply but imports of cod liver oil from Norway are easing the market on this item. The increase in supplies of cod liver oil of U.S.P. potency has lowered the current market price which now ranges from $2.15 to $2.20 per gallon. High-potency oil is not so plentiful and prices are firm at $3.25 per gallon.

Menthol Easier

Spot menthol prices were down to $4.45 to $4.55 per pound. Production of the 1946 crop of Brazilian menthol is under way and representatives of shippers have intimated that in all probability the total output will be considerably less than that in 1944. In this country, the natural product is likely to encounter increasing competition from synthetic menthol. Consequently, just how the market will readjust itself to the addition of Japanese production to other output in the world remains to be developed.

It is rumored Japan had sizable quantities of menthol, since taken over by the American Army. Nothing, however, is known about when this material will be released.

China is also emerging as another potential source of supply for natural menthol. It is said that China saved existing stocks of menthol during the war and that there is some 200,000 pounds of this commodity available for prompt shipment. Since China was not aware of the entry of Brazil as a menthol producer their first offers were entirely out of line with the existing market. They are expected, however, to reduce their shipping prices to a basis which would make it possible for importers to offer Chinese menthol here at $4.50 a pound.

JANUARY PRICE CHANGES

UP

Burdock root 5c
Cananga oil Native $3
Candelilla wax 15c
Carnauba wax 25c
Geranium oil African $2
Bourbon $1.50
Golden seal root 25c
Indol $3.50
Ionone methyl $1
Lycopodium 50c
Origanum oil 45c
Orris root Flor. 15c
Papain 10c
Petit Grain Oil Sa 40c

DOWN

Almond oil sweet 20c
Arabic gum sorts ½c
Bois de Rose Braz. 25c
Caraway oil $1
Clove oil 15c
Cream tartar 6c
Ginger oil $1
Menthol nat. 10c
Mercury metal $5
Rochelle salt 4c
Saffron Spanish $3
Sage oil Spanish 15c
Seidlitz mixture 3c
Senega root 50c
Tartaric acid 8c
Valerian root 3c
Ylang ylang oil Bourbon $1

• Prices quoted in this section were current on the first of this month.

Titanium Production Expands

Assignment of CC ratings under Priorities Regulation 28 to producers of titanium dioxide to enable them to acquire materials and equipment to expand production of this material was announced by the Civilian Production Administration January 16.

Three companies are contemplating an increase in production capacity of about 20 per cent over current production rates, 10 per cent of which would become available in July and 10 per cent in October if the necessary equipment can be obtained.

According to the CPA, the supply of titanium dioxide is substantially below minimum requirements, and the shortage is so serious as to threaten the increased production of peacetime products. There is no shortage of raw materials from which titanium dioxide is made, it was explained, but the problem is one of a shortage of production capacity.

Tartrates Down

In order to meet competitive conditions that have existed for the past several months, principal manufacturers of tartrates have announced sweeping reductions in the price of tartaric acid, cream of tartar, rochelle salt, and seidlitz mixture. Tartaric acid is used as a substitute for citric acid in the manufacture of beverages. It is also used in the manufacture of baking powder, in effervescent drinks, in medicine, pharmacy, dying and printing and in photography. The change in prices by domestic makers is the first since September 1941. Spain has been in a position to ship acid to this country at a cost that has permitted agents of the shippers to undersell the domestic manufacturers by a fairly substantial margin and both the imported acid and cream have not been difficult to obtain.

The new and lower price schedules follow: tartaric acid, granular or powdered, in barrels 63c; kegs 63½c, in 10,000 pounds, single shipment 62½c; cream tartar powder or granular, barrels 52c per pound, kegs 52½c, 5,000 pound one lot shipments 51½c; rochelle salt U.S.P. fine granular or powder 39c

(Continued on page 275)

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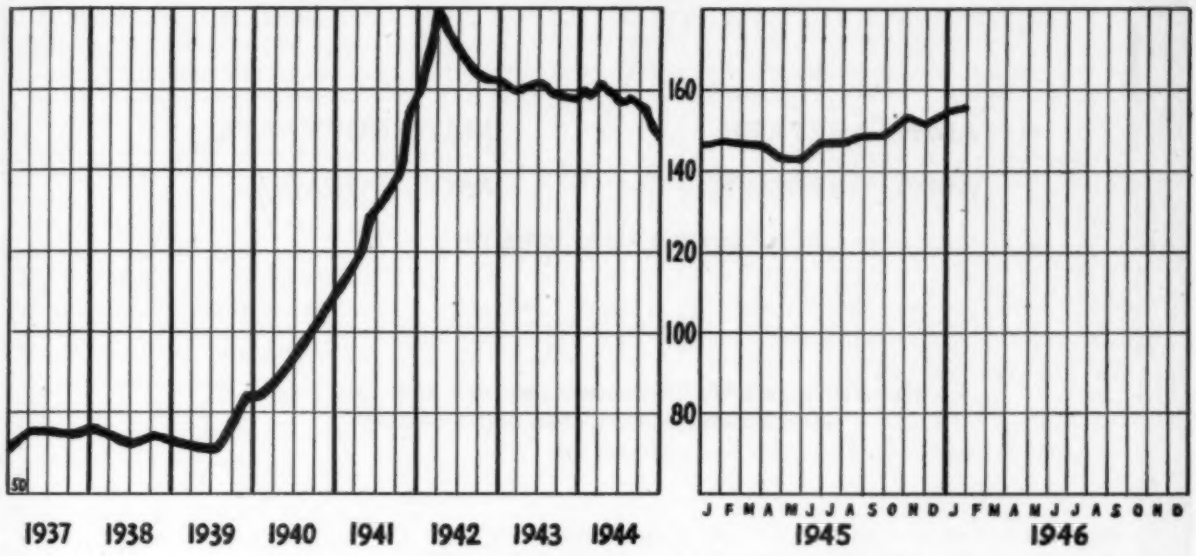
50 Raw Materials—Weighted Price Index. 1926=100.



The price index of fifty commodities for January advanced from 156.2 to 156.5.

Movement to High Prices in Botanicals Expected; Vanilla Tight On Spot, Supply Prospects Good

Market activity in crude drugs is rising with the greatest interest revolving around those botanicals which are very scarce. Consuming manufacturers are scraping close to the bottom of their reserves in many such items and, in seeking supplies for both current and future needs, they are encountering a paucity of spot material.

There is a marked movement toward higher price levels, reflecting the increased costs of replacement goods, both domestic and foreign. Some import items, which were removed from trade lists in the war years because of price-ceiling restrictions, are now being purchased and offerings reveal notable advances in primary source costs.

The volume of September crude drug imports fell 44 per cent compared with the August receipts; a decrease of 2½ million pounds of licorice root accounted for a large part of this decline. The 9 month total for 1945 showed a 15 per cent drop compared with the corresponding total for 1944. The outstanding quantity decrease took place in cinchona bark receipts, which outweighed the gain of 20 per cent recorded in the total import volume of all other items.

The market for mucilaginous gums, arabic and tragacanth was fairly normal—supplies being well maintained. With the arrival of additional supplies of karaya, competition was quite active in low-grade gum. Of the aromatic gums, olibanum stocks gained to expand interest in siftings, but call for other grades was typically routine. Myrrh could be had on the basis of slightly reduced prices.

Mucilaginous-gum imports in September were three times as large as those of August. Arabic accounted for 3 million pounds and karaya, 1¼ million. The 9 month aggregate rose 39 per cent over that for the corresponding period of 1944. Aromatic-gum receipts in September soared with the arrival of over 100,000 pounds of olibanum and the first myrrh imports since February. However, the January-September total was 23 per cent lower than last year's comparable figure.

Market activity in most balsams is restricted by supply limitations. Arrivals of copaiba were earmarked for prompt delivery. The shortage in tolu persists but fir and Peru balsams are more readily available.

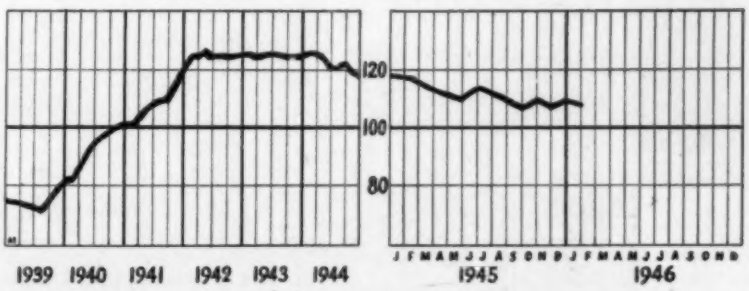
Prices are Firmly Maintained

Imports of balsams in the January-September period of 1945 increased 52 per cent over similar months of 1944. The largest increase occurred in Peru balsam. Fir balsam was the only item to record a decrease.

Vanilla Outlook For 1946

The first beans from the 1945-46 Madagascar crop, forecast at 600,000 pounds, have already been shipped to the United States, but those from the

15 Medicinal Chemicals—Weighted Price Index. 1926=100.



The medicinal chemicals index declined from 131.0 to 129.5. Menthol was lower at $4.45; cream tartar was down to 51½ cents; mercury declined to $105.00.

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corresponding Mexican crop will not be available in quantity until the Spring of 1946. Estimates of the Mexican crop vary from 175,000 to 350,000 pounds. No data for Reunion are available, but the crop doubtless will be much smaller than the prewar average of 110,000 pounds. The 1945 crop in French Oceania, harvested from May to September, is expected to reach 280,000 pounds. Output in the Seychelles, Mauritius, and the West Indies probably will be normal. No reports have been received concerning the condition of vanilla plantations in the Netherlands Indies. Total 1945-46 world production is expected to exceed the estimated production of 1,100,000 pounds in 1944-45 but to fall short of the 1935-39 average of 1,550,000 pounds.

Although a below-average crop has been forecast for 1945-46, indications are that supplies of vanilla beans will be sufficient to permit United States consumption during 1946 at the prewar level. United States imports may exceed the 1935-39 annual average of 1 million pounds, but European imports for consumption doubtless will be substantially less than in prewar years.

Miscellaneous

Late inquiries for dandelion root fail to uncover any available supplies for spot delivery. Offerings of carnauba wax from Brazil are still limited to small quantities. Higher prices are being paid by Great Britain for sarsaparilla root in Jamaica. Importers are only expecting to obtain half the amount of candelilla wax they received during 1945 under the new quota established in Mexico. Temporary restrictions have been placed on peeling operations with the result that a tight position is expected in soap bark. Ergot is holding firm at $1.60 a pound. Lycopodium is firm at the recently advanced price level of $1.75 a pound.

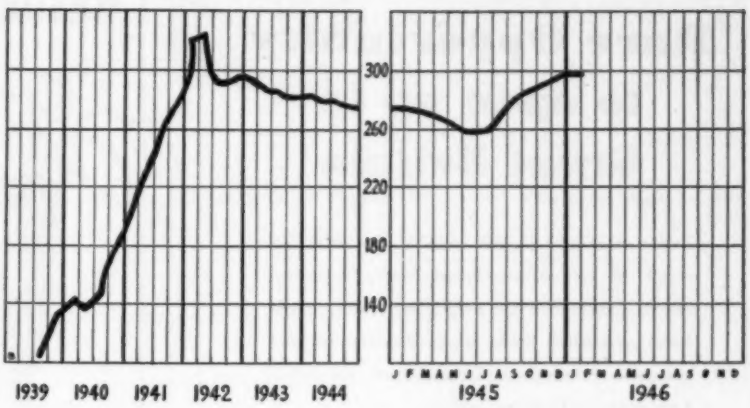
TARTRATES DOWN

(*Continued from page 271*)

per pound, 5,000 pound lots one shipment 38½c; seidlitz mixture in barrels 31¼c, 5,000 pound one shipment 30¾c.

The reduction in rochelle salt is not likely to bring about any relief in the exceedingly tight supply position. Supply is barely sufficient to take care of domestic requirements and numerous inquiries reaching dealers' hands are reported going unfilled due to the complete absence of offerings in the open market.

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index remained without change at 290.2.

Agar Strong

Japanese agar has long since disappeared from this market and it is understood that domestic production is virtually all sold. Odd lots in the resale market have been sold at as high as $4 a pound it is said. The article essential for the preparation of culture media may be more freely available later in the year when the domestic crop of seaweed is available. Last year's production was adversely affected by unfavorable weather conditions.

Nothing official has been made known regarding the prospects for a resumption of importations of Japanese agar in the course of this year. Need to make the Japanese as self-supporting as possible has suggested the idea that the agar industry in Japan would probably be restored as quickly as possible. Imports in the last prewar year totaled 497,000 pounds.

Mercury Down

Mercury declined during the past month to a basis of from $104 to $110 a flask. Principal feature of the Bureau of Mines report for the month of November was the increase shown in imports for that month. The bureau report showed that the imports of 18,261 flasks were close to the July peak of 19,504 flasks while consumers' and dealers' stocks fell nearly 15,000 flasks to 23,000. Most of the foreign metal, according to the bureau was destined for the Government stockpile while the decline in stocks during November represented a transfer of metal from industry to Government inventories other than those held by the Office of Metal Reserve. It is indicated that some 30,000 flasks were placed in stockpile.

More Citric Acid

Information from Hawaii states that production of citric acid continued throughout the war without interruption. The only decline had been due to reduced fruit tonnages, caused by prolonged drought conditions, and this decline was reported comparatively light. Inquiry in this market revealed that some sellers of Hawaiian citric acid are now awaiting the first shipment of acid to be exported from the Islands for a very long time.

Glycerin Tight

The latest report concerning production and stocks of glycerin shows an adverse trend in the statistical position of the market as far as stocks are concerned. During October 7,170,000 pounds of chemically pure glycerin was produced as compared to 7,079,000 pounds in September. Stocks held at the end of October amounted to 19,067,000 pounds of chemically pure glycerin as compared to 22,271,000 pounds at the end of September.

It may thus be seen that while October production was up slightly from that of September, stocks at the end of October were sharply down from those on September 30. Demand ran substantially ahead of the availability of glycerin.

Rare Opportunity to open up in Great Britain

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Miscellaneous

Demand for penicillin continues to run well ahead of the available supply. Disposition of the large government-owned stockpile of alcohol presents a problem which has not as yet been solved. Some sales of santonin have been reported at around $185 a kilo. October production of primary, normal butyl alcohol totaled 5,906,393 pounds. Production of acetanilide is expected to catch up to consumer requirements shortly. Reserves of crude iodine are believed to be ample and manufacturing consumers may count on steady deliveries out of stocks already in this country.

ESSENTIAL OILS

The essential oil industry operated in 1945 on the basis of limited supplies for most items. Because of the absence of many of the exotic oils, manufacturing consumers were obliged to resort to substitution, primarily with aromatic chemicals.

The improvement in 1945 imports fell far short of fulfilling requirements, but the arrival of larger quantities as well as oils which were missing on the import list during the war years presaged betterment in the 1946 supply position. Entries of Italian oils and French essential and floral oils were significant in 1945; however, 1946 imports cannot be expected to reach the high level of the demand which has stacked up as a result of stock depletions during the war years.

The adverse conditions which developed in the Far East subsequent to VJ-day are delaying further the day of shipment of badly needed oils from China and the Netherlands Indies. That some of these oils will reach our ports in 1946 is generally conceded, but predictions as to quantities is not possible because of lack of reliable information.

Spanish Essential Oils

From January through August 1945 exports from the Seville Consular District in Spain (Provinces of Badajoz, Caceres, Cadiz, Cordoba, Huelva, and Sevilla) included 17,636 pounds of oil of cade, valued at $8,788; 16,659 pounds of oil of eucalyptus, with a value of $15,695; 2,204 pounds of oil of origan, $4,851; 81,569 pounds of oil of rosemary, $81,0111; 6,040 pounds of rue oil, $17,849; 141,091 pounds of spike oil, $280,448; 13,261 pounds of oil of thyme, $27,809; 2,240 pounds of spike lavender flowers, $306; 2,240 pounds of gum labdanum, $2,658; and 1,102 pounds of bitter orange leaves, $201.

Other exports during the same period included 2,204 pounds of oak moss, valued at $570, and 880 pounds of resinoid of oak moss, worth $11,791.

Lemon Oil Surplus

The Department of Agriculture discloses that it has about 3,000,000 pounds of surplus army stock of lemon oil brought from Sicily during the latter half of 1945 which it will be offering for sale shortly. The condition of the oil is now being analyzed in order to determine its approximate value. Officials have been conferring with members of the industry for the past month on how best to dispose of the material and hope to reach a decision soon.

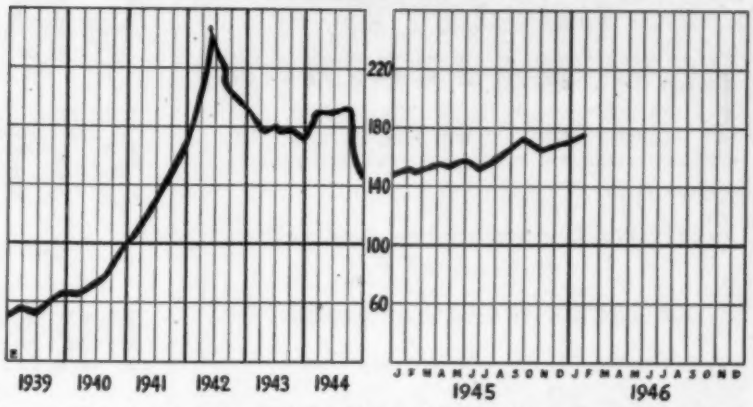
In the meantime domestic output of lemon oil has been subject to uncertainties because of labor difficulties on the West Coast.

Lemongrass Supplies

The lemongrass supplies from this hemisphere are encouraging. British India was the world's foremost supplier, sending to this country 263,000 pounds in 1940, and 548,000 in 1941. Since the former figure is a more normal one the 223,000 pounds supplied by Guatemala, the Dominican Republic, El Salvador, Haiti, Honduras and Mexico in 1943 would well illustrate the importance of South and Central America in this market.

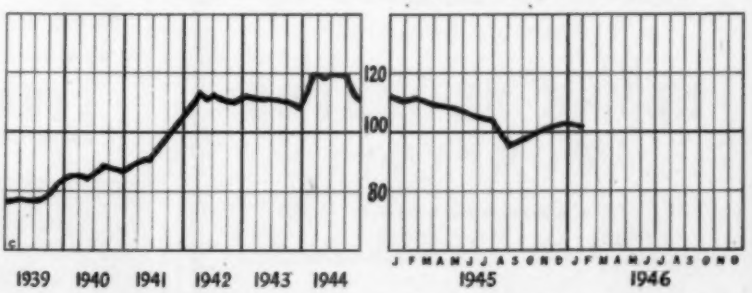
The future position of Guatemala and its neighbors in the lemongrass picture no doubt depends on the price structure of this commodity. According to the government figures, the lemongrass imported from 1937 to 1939 had an average value of only 33c a pound. The Central American product in 1943 sold at an average price of $1.82 per pound, a figure which had receded by 1943 to $1.09. It is questionable whether lemongrass from India will ever again sell at 33c a pound or less but it seems certain that Guatemala and its neighbors will eventually be confronted with severe competition.

15 Essential Oils—Weighted Price Index. 1926=100.



The essential oils index advanced from 162.1 to 165.7. Cananga was up to $11.00 Geranium rose to $18.00. Bois de rose declined to $5.25, and clove oil was easier at $1.50.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926=100.



The cosmetic raw materials index declined from 103.1 to 102.8. Menthol dropped to $4.45; petrolatum was 5¾ cents; almond meal 25 cents.

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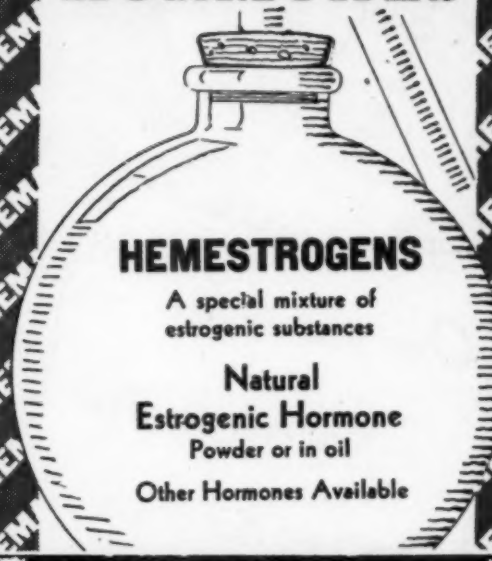

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READERS' QUESTIONS

PRESERVATIVE FOR HORMONE CREAM: In preparing an estrogenic hormone face cream I have encountered considerable difficulty in preventing the development of a strong unpleasant odor after the cream stands for several days. The perfume which I am using does not seem to be effective in covering this odor. The principal ingredients are hydrogenated cottonseed oil, vegetable oils, lanolin, water and estrogenic substance. I will appreciate any suggestion which you can give me to overcome this difficulty. Do you think a preservative is needed, and if so, what kind and in what proportion? Washington.

I believe that a preservative is indicated. I would suggest that you try a preservative such as propyl parahydroxybenzoate which is used in the proportion of 1:2000 and 1:1500, or benzyl parahydroxybenzoate which is used in the concentration of 1:10000 and 1:5000.

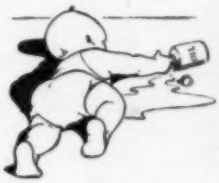
EURESOL: Will you please inform me what euresol is and its beneficial value on the scalp? I would appreciate an example of its use. Chicago.

Euresol is a common name for resorcinol monoacetate. It is employed as a stimulant and antiseptic in the preparation of scalp care products. It is often used to replace resorcinol because it is not quite so likely to stain grey, white or light colored hair. A simple formula for a Euresol Tonic is given by Chilson as follows:

Euresol	3.5
Alcohol (95%)	56.0
Distilled water	40.0
Perfume	0.5

VAGINAL DOUCHES: Preparatory to manufacturing a vaginal douche preparation I decided to check the literature on the subject. It left me rather confused because some writers recommend an alkaline preparation and others an acid preparation. My own impression from what I have read is that an acid product is preferred. Can you give me any further information to substantiate this impression? Any help will be appreciated. New York.

The subject of pH of vaginal douches has been thoroughly reviewed by K. J. Karnaky in the July 1945 issue of the "American Journal of Surgery," page 107. In this report Karnaky points out that many physicians are still prescribing alkaline substances, sodium perborate, borax, sodium bicarbonate, potassium permanganate, magnesium sulfate and sodium chloride or a combination of these as cleansing douches for the vagina, and in treating vaginal leukorrhea, when it is scientifically established that the normal reaction of the adult vagina is acid. On the basis of his examination of twenty-four drugs he thinks that acid douches (e.g. pH 3.0 to 5.0) should be used, because with pathologic changes there is hypoacidity of the vagina, and, as these changes increase, the reaction approaches the alkaline side. In his opinion, alkaline douches favor the growth of pathogenic organisms.



BABY CREAMS: We are interested in obtaining one or two formulas for a baby cream. I recall having seen such products described in your magazine earlier in the year, but I have not been able to locate the article in question. Please send us these formulas. Reading.

A baby cream somewhat similar in composition to a liquid cleansing cream may be made along the following lines:

Mineral oil	59.0
Lanolin	5.0
Cetyl alcohol	3.0
Petrolatum	25.0
Paraffin	8.0

If an emulsified product is desired, you might try:

Cetyl alcohol	20.0
Mineral oil	15.0
Lanolin	5.0
White petrolatum	50.0
Glycerine	10.0
Rose water	60.0
Perfume	**Sufficient**

PATENTS FOR SALE OR LICENSE: In your number for July 1945, you report that information on patents to be licensed or sold will be made available to the public. Can you tell me where this information will be listed? Buenos Aires.

Information on patents available for sale or license is published regularly in the "Patent Gazette", a periodical put out by the Commissioner of Patents in Washington.

AFTER SHAVE LOTION: Can you suggest a formula for an excellent after shave lotion using approximately 50 per cent alcohol? Cleveland.

A product of this type can be made along the following lines:

Zinc sulfocarbolate	2.0
Alcohol	50.0
Water, to make	100.0
Color and odor	**Sufficient**

A somewhat more rounded product can be made from:

Perfume compound (Bay type)	0.4
Alcohol	50.0
Citric acid	0.4
Water, to make	100.0
Color	**Sufficient**

Dissolve the perfume compound in the alcohol. Separately dissolve the citric acid in the water, add the aqueous solution to the alcoholic solution with stirring. Set aside for 48 hours, chill and filter with the aid of talc.

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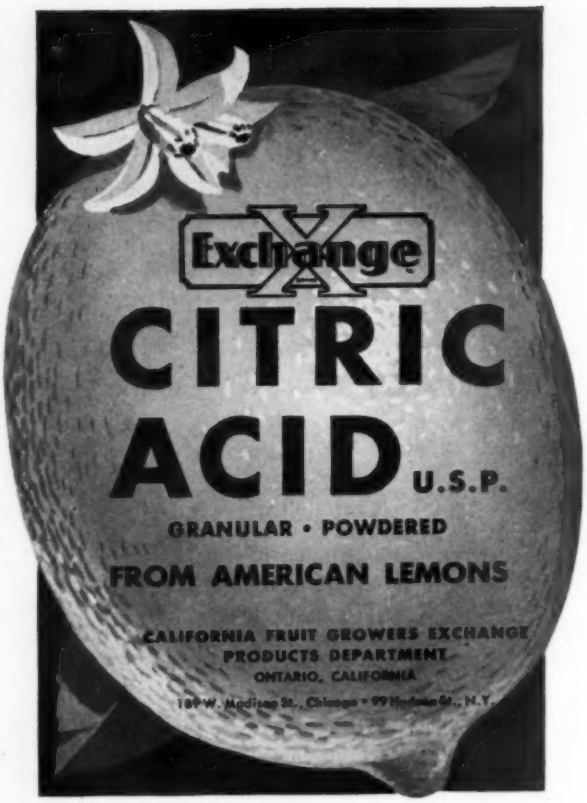

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Development of Pharmaceutical Specialties

(*Continued from page 255*)

of all research workers would make the meetings unwieldy. Greater effectiveness would be assured by restricting the meetings to small groups working in related fields. However, the leaders of all groups should meet regularly with the research director to discuss the work in progress. Group leaders may in turn pass on to their groups the information obtained at these general meetings. Keeping all members of the staff informed regarding the work going on in other parts of the laboratory, especially when it is a large one, is an important factor in the promotion of harmony.

The frequency with which meetings are held is a matter that must be decided for each individual case. Once a week would seem to fit the majority of cases. Those attending the meetings should come prepared to participate in the discussions. One individual may be appointed as secretary with the responsibility to prepare a report of each meeting.

Research Reports

It goes without question that periodic progress reports of the work carried on in the research department should be submitted to management. The manner of reporting will doubtless vary with the size of the company. Each research worker should submit a progress report of his own work to his group leader or to the research director at intervals of perhaps once a month. From these the research director may prepare monthly reports for management. When a problem or some specific phase of it is completed, a detailed report may be prepared by the worker showing what was done and the results obtained. These reports may be circulated among members of the research department and also among the executives of the company. These will form a record of the work completed and may be filed so that they are available for future reference.

Budget

A budget is a necessary means for maintaining a check on research costs. When an appropriation is made authorizing research on a specific project, an identification number should also be assigned to the project. The time of personnel and expenditures for materials and equipment may then be charged against the project number, and periodically the accounting department may issue statements showing the accumulated cost and the residual appropriation. At intervals of possibly six months the expenditures on a research project and the progress made should be reviewed with the object of determining whether research should be continued or brought to a conclusion. This may well be a function of the New Products Committee. At such meetings all executives from top management down must strive to be as objective as possible in the exercise of their judgment.

A research budget should be so arranged that it does not restrain research activities and does not consume too much of the time of personnel in its operation. The amounts allocated for specific projects should be regarded as flexible, and upon exhaustion should not necessarily signify the termination of the project. Viewed in the proper light, a budget can be helpful in keeping research expenditures in productive channels thereby avoiding the squandering of funds on worthless projects.

(*To be continued*)

Sportsman

(*Continued from page 193*)

Good Grooming, Grooming Essentials, Shave Shop etc. for this section.

The year 1945 meant for Sportsman a period of rapid expansion in sales and distribution, limited only by available packages and stemming from the careful spadework of the previous three years. Sales passed the two million dollar mark, distribution reached 4,000 stores, adding to the selected list of 680 department stores a little over 900 carefully selectived drug stores and 360 class haberdashers and men's shops.

Everyone in the industry knows that 1946 is the first of the critical years for men's toiletries. There is unquestionably gold in these hills, the vein showing bigger each year, but there are just too many miners. No store, in its wildest enthusiasm can accommodate 10 per cent of the brands available.

In laying plans for 1946 advertising and general sales policy, Jack Moore, Donald De Lesser, sales manager, and Leslie Fairweather of Wesley Associates, Sportsman's advertising agency, made two fundamental decisions (1) that Sportsman is committed to a selective distribuiton, will find its greatest security there and can realize its full potential in profits in this way and (2) that the full value of a selective distribution can only be realized when, on the one hand, there is a steady, widespread pressure to buy from the retailers in every community, whom the company would not sell, and, on the other hand, when the retailers they do sell are fully aware of this but are satisfied that the company will not alter its declared policy of distribution.

The decision to stay with a policy of selective distribution was nothing new in the cosmetic business. The vast majority of the famous names in the industry, names that have seen many hundred bright stars flash and fade like a shooting star, have made this their number one policy, often with fanatic conviction. The syndicate stores are witness to what happened

(*Continued on page 287*)

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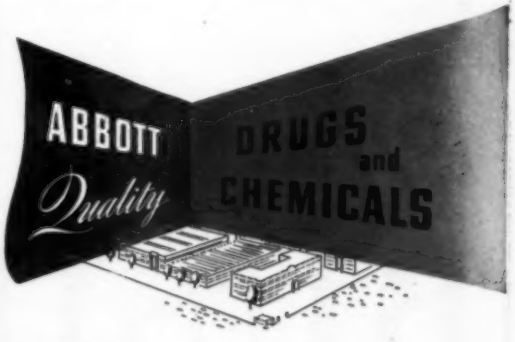

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John G. Searle

(Continued from page 197)

so much sense that the 800 odd Searle products were eventually cut down to a bare 25. Today Mr. Searle is sure he made the right decision—his profit sheet is the most conclusive evidence.

While John Searle has spent considerable time in learning and managing his company's problems, he has not made the mistake of getting only a narrow point of view. He long ago realized that the industry's problems were his, too. As a result of this constructive thinking he has vigorously and conscientiously participated in both ADMA and APMA activities. Besides various committee appointments, Mr. Searle has served as president of both Associations.

John G. Searle, the man, is short, serious, has thinning hair, and when enthused displays a friendly smile. He is known as a forceful leader who says what he thinks. His opinions are sought after, and in most instances they make sense.

The Searle Circle, as the chief executive affectionately calls his 500 employees, seem quite happy in their relations with management. They spend their work day under ideal conditions. The new three and one half year old Searle plant is located in the pleasant Chicago suburb of Skokie (about an hour's train ride from the Loop) and is considered one of the most up-to-date plants in the industry. Every effort is made to promote harmonious employer-employee relations. John Searle feels, and probably rightly so, that happy workers are efficient workers.

In outlining his views to the industry on future relations with labor, Mr. Searle presented plenty of food for thought and action.

"We in the pharmaceutical industry have a comparatively low percentage of labor costs and a high respect for human life and happiness and should be particular and anxious to maintain the highest possible working conditions. Part of this is very definitely the assurance of security for our employees and the arrangements necessary to make them happy on the job; adequate life insurance; protection for those who become disabled, and pension plans for the aged. These are easily accomplished and require only the foresight to include them in a financial budget. In these modern days, and particularly because of the interest our members have in health, the inclusion of hospitalization, surgical and medical fees, and other health plans should be a part of the program of each firm. How can we expect other industries to foster plans of this sort which in the end will result to our benefit if we do not point the way for them to do it? Much has been written on this subject and many of the leading firms of the industry have developed excellent programs. As a consequence there is plenty of example for any firm with a forward looking policy.

"These plans, if properly made, are not an expense, but rather are an investment in the firm's own employees and if properly directed will bring dividends.

"Because many of these plans, as far as the individual employee is concerned, are dependent upon compensation which the employee receives, head management should constantly review payrolls to make sure they are adequate and truly representative of the job the individual employee is doing. Job evaluations and job analysis by experts has become a very usual thing during the war period and I recommend that this be thoroughly considered by each firm. A job evaluation properly done analyzes the requirements of the skills, responsibility, effort and working conditions for each person in the establishment. When properly applied, it eliminates inequality of pay and assures compensation in relation to the duties performed. To me job evaluation is actually an inventory of the jobs available and a personal inventory of the people assigned to those jobs. Top management should know a great deal more about the intricacies of the duties their employees are performing. Job evaluations or personnel inventories can help serve this purpose."

Mr. Searle did not speak in theory. He knows that a sound labor policy pays off. A look into the Searle Circle reveals that their able boss knows what he's talking about.

John Searle is looking forward to the day when his sons, Daniel C., now in the Navy, and William L. move into the driver's seat. He is itching to go up into the woods to fish and hunt—the life he loves so much. When that day comes, the drug industry will take off its collective hats and say "A job well done, Jack!" We agree.

Sportsman

(*Continued from page 283*)

to some famous brands when this policy was dumped overboard in the ecstasy of a band wagon scramble of retail demand. But it is new, certainly, in the cosmetic industry, to use the essential characteristic in selective distribution as the basis of a planned advertising campaign.

Many people in the industry have labored under the delusion that selective distribution means a limited distribution in the sense that certain consumer areas or classes—say, rural or sections of large metropolises or small towns where no store is located, are sacrificed in favor of pampering large retailers. Nothing could be further from the truth. Any cosmetic product selling for one dollar or over is not a utility product like a box of aspirin, ivory soap etc. but a shopping item that compares in the higher price range with hats, shoes, table ware etc.. A well planned selective distribution makes the commodity available to every possible customer in the U. S.; not in every community, but in every material shopping area, not in every retail store in this shopping area, but in the stores of the capable, aggressive merchandisers through which the entire shopping traffic for that area passes to shop for one commodity or another.

deserves the best application the WORLD can give

You don't have to fit your production, your containers, your labels to the Labeler. There is a WORLD Labeler to fit the job—in the one best and most economical way.

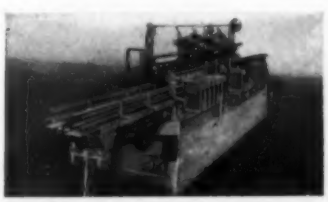
That is why it will pay you to keep in touch with the WORLD. No matter how simple or how specialized your requirements you can depend on it that the WORLD Labeler recommended for the job will be the *right* Labeler for the job—because only WORLD builds all sizes and types.

Why not tell us about your labeling problem or, better yet, send us samples of your labeled containers and let us submit detailed recommendations and estimates.

The WORLD TURRET Labeler does extra fine labeling of smooth, fluted or fancy round containers.

The WORLD Semi-Automatic Labeler applies body labels, neck labels, foil, all-around labels to any size container from ounces to gallons.

WORLD LABELERS



The WORLD BEE-LINE Labeler applies front labels, front and back labels and often neck labels too, if desired, to containers of a wide variety of sizes and shapes.

GUNNING .. SINCE 1922

We supply the Soap, Perfume, Drug, Pharmaceutical, Food, Flavor, Cosmetic and Insecticide Trades.

Here are a few of the products of our own manufacture

AROMATICS

Amyl Cinn. Aldehyde
Aldehyde C-14 (Peach)
Anethol N.F.
Benzyl Benzoate F.F.C.
Cinnamic Aldehyde
Citral C.P.
Eugenol
Geraniol Prime
Geraniol for Soap
Ionone for Soap
Linalool Extra
Methyl Ionone

NATURAL & IMITATION OILS

SPECIALTIES—COMPOUNDS

Deodorant Oils
Flavoring Oils
Perfume Odors
Spice Oils
Perfume Oils

GUNNING AND GUNNING

601 WEST 26TH ST., NEW YORK 1, N. Y.

AROMATIC CHEMICALS MANUFACTURING DIVISION

The essential characteristic of selective distribution is not weakness in selling, because a lack of demand from other stores would make such a franchise a mockery. It is not pampering the big retailer because it means putting a burden of a delivery of volume up to him. It does mean picking an adequate number of the best stores, stores with ability to contact every consumer and then giving them the opportunity of getting the full rewards of repeat business which develops from their advertising and promotions, without having a number of intercepting stores whose only merit is a neighborhood location climb the band wagon and grab the repeat sale. Selective distribution separates the creative merchants from the me-too-ers. But never before have the me-too-ers been encouraged to yell louder by a rigid adherent of selective distribution through the enlightened perception that this clamor will certainly persuade the elect to work much harder, once they are assured that company policy means what it says.

Nineteen forty-six advertising for Sportsman will include increased expenditures in consumer media and two trade magazines which will carry different copy and serve two fundamentally divergent purposes. Sportsman advertising has appeared in BEAUTY FASHION in every issue since the original introductory insert in September 1941. During the last two years this advertising has been a consistent use of four colors in each issue, using consumer copy. Both the company and the advertising agency believe that this type of advertising in BEAUTY FASHION has been thoroughly justified and should not be disturbed. But in order to balance the advertising appeal in the other trade magazine, it was decided to contract for several additional black and white pages, to be used for policy statements and to face the four color consumer advertisments.

The "American Druggist" has been added to Sportsman 1946 list. In sharp contrast to the selective distribution of BEAUTY FASHION, which covers only those primary department, drug and chain drug stores where cosmetics of one dollar and over are predominantly sold, "American Druggist" has a mass circulation giving a full, blanket coverage of the entire retail drug trade.

While BEAUTY FASHION's coverage includes the present distribution of Sportsman, excepting haberdashers, and probably with its six thousand stores contains the ultimate limits of this distribution, the circulation of "American Druggist" with over 60,000 copies, while including an approximate maximum of 2,000 drug stores which the company is selling or will sell, contains also over 50,000 stores or 96 percent of the store coverage which the company will not sell.

The originality of this new advertising campaign lies in the fact that "American Druggist" is being used in a full page every-issue schedule by John Hudson Moore, Inc., to reach the stores they will not sell. Copy, which must be handled with skill and delicacy

is primarily being used to create a demand which will not be filled.

But the mere fact that Sportsman advertising is to appear in a medium of mass distribution with such constant regularity has its dangers as well as its multiple assets. Retail pressure for Sportsman will strengthen and activate its selective distribution providing, and this is a major, capital letter IF, there is no suspicion among Sportsman retailers that a double-cross is in the making. In order to prevent any such question from arising in the minds of its present retailers Sportsman policy pages in BEAUTY FASHION, facing four color consumer pages will state specifically and categorically that the company believes in and is committed to selective distribution. And reasons for that belief, will be given. In the first BEAUTY FASHION policy advertisement, which appears in January and begins "This is a frank, public statement of our Sportsman merchandising policy" the full statement carries the name of the president, John Hudson Moore in a final signature.

Point-of-Sale Selling Through The Cosmetic School of Beauty Fashion

(Continued from page 199)

salesmen in each respective area. In New York a similar large regional sales meeting was held on the evening following the examination. It is unnecessary to point out the advantages in such a combination event.

But, now, to go back to the beginning. The idea was accepted. The execution of the idea involved endless detail. It was decided to make eligible for the School only those store representatives who would have completed at least one year's service as of the starting date of the course. Those who had served a shorter term were not considered as having yet proven their "stayability" and sufficient worthiness of the investment to be made. As we will point out later, however, these girls are not to be ignored in this training-promotion program. For, in the event this point hasn't been made clear so far, Lentheric visualized the School as a promotion plan—a means of vitalizing the representatives on the line so that they would put more imagination and intelligence into their daily selling, thereby stepping up actual sales.

After the girls were selected, it was necessary to obtain the enthusiasm and cooperation of the stores and, specifically, of the buyers. So, before the invitation was issued to the store representatives, a letter explaining the plan was addressed to each of their buyers. As was to be expected, some buyers were completely unresponsive, others simply agreed to the plan, and still others replied in glowing approval —but not one opposed the idea! Here are just a few excerpts from store letters—

"We will be most happy to have our Lentheric representative, Mrs. "C." take this course. She is also

De-ionized water from new laboratory unit

Front and back views, laboratory De-ionizing Unit

You will get 60 gph of De-ionized water, comparable to distilled water, from the above compact laboratory unit—at 1% to 10% of the cost of distilled water! (A similar ILLCO-WAY laboratory unit provides 100 gph.) Leading industrial, chemical and pharmaceutical plants use ILLCO-WAY De-ionizing equipment for obtaining this high-purity water. Purity meter shows quality of water at all times. No fuel, no cooling water required, no periodic dismantling for cleaning. Write for full details and literature today!

ILLINOIS WATER TREATMENT COMPANY
847-2 Cedar Street, Rockford, Illinois
7310-F2 Empire State Bldg., New York City

PLANT INSTALLATION
Flow rates range from 12 gph (smallest laboratory unit) to plant units of 500,000 gph. Typical plant installation (500 gph) is illustrated at the left.

Water Treatment Engineering

TESTED IN THE LABORATORY
ILLCO-WAY
PROVED IN THE FIELD

PUROCAINE BRAND PRODUCTS

Procaine Hydrochloride
USP XII

Procaine Base

Butyl-p-aminobenzoate
USP XII

Isobutyl-p-aminobenzoate

Ethyl Aminobenzoate
USP XII

Sodium Methylarsonate

Epinephrine USP XII

Sodium Pentobarbital
USP XII

Dl-desoxyephedrine

We invite your inquiries for prices and any desired additional information.

PUROCAINE, INC.

Sales Division
90 West Street
New York 6, N. Y.

Main Office
Packard Building
Philadelphia 2, Pa.

very much in favor of this, as I have discussed the matter with her. Therefore, kindly go ahead with your plans for the course, and, of course, later the examination."

"We both feel that this is a very educational and worth while program you have planned. Please let me take this opportunity to thank you for the interest and splendid cooperation concerning the promotion activities in our store in regard to the cosmetic field."

"Received your letter and want to thank you for the splendid opportunity you are offering Miss "W.M." I personally feel this training will pay out a hundred percent both for the "X" Store and Lentheric. It is very gratifying that the leaders in the industry are always the pioneers in helping to promote our sales."

(These two excerpts indicate that the stores also visualized this idea as a promotion plan.)

"I have received your letter concerning the "Beauty Fashion" Cosmetic School. I feel very excited about the possibilities of this educational program and you can count on our cooperation in going along with you on this course."

"We think this is a wonderful idea, and should prove big dividends for your representative."

With almost no exceptions, the girls to whom this School was offered, with all expenses paid by Lentheric, accepted—most with enthusiasm, some with misgivings as to their abilities but anxious, nevertheless, to make a try. It was to be expected that between the time of acceptance and the time of examination, there would be some losses in the ranks. But 80 percent of those who started, finished: and out of that group, there was a very low percentage of failures. Since the typical sales girl is more adept at talking and gesturing than she is at disciplining her thoughts on paper, this was very gratifying.

In addition to the satisfaction of receiving a certificate from the School on successful completion of the course, Lentheric decided to set up a number of Victory Bond prizes—both local and national. These prizes totalled $550.00 in value and added extra incentive to doing the job well. Traveling representatives were also invited to take this course and a separate prize was set up for this group.

It was also promised that each graduate would be presented with a beautiful plexiglas frame in which to display her certificate on her counter—another means of capitalizing on our investment at point-of-sale. While the store representatives were busy at their home work, preparations were going on feverishly for the conduct of the examinations. Nine cities were selected for examination centers with girls brought in from outlying cities to these focal points. All examinations are held under the supervision of a BEAUTY FASHION proctor. When possible, these were held in our show rooms or auditorium; but where our own facilities were not available, arrangements were made with a hotel in each city. Again,

buyers had to be consulted regarding the necessary leave for the sales girls, transportation and hotel rooms arranged if the trip involved were an overnight one. All such expenses were assumed by Lentheric. The examinations were held in the afternoon followed by a social hour and then a gala dinner party. At all events, one or more Lentheric representatives were present to act as host or hostess.

We were working pretty much in the dark so far as costs were concerned. Just exactly one more girl took the examination than our original estimate anticipated. Total costs were underestimated by about 15 percent which wasn't bad figuring, but the number of our prizes were increased as the School gained momentum, and entertainment costs must have been planned on the basis of pre-war prices. Costs included the charge for the course itself, the proctors' fees, travel, hotels, entertainment, Victory Bond prizes, and the plexiglas frames for the certificates. It all averaged about $55.00 per store representative, an extremely nominal investment in a girl who would certainly increase her sales more than a dollar a week to repay this investment.

In fact, looked at in that light, it was about the cheapest investment that could possibly be imagined. And, there was no stinting anywhere along the line. The girls were given the best of everything as well as every encouragement, and made to feel like entrants in the hundred yard dash with trophies for everyone! In reviewing the whole campaign from every point of view, we are now sold on the idea of making this a continuing promotion, an idea that was there from the start, but one which needed verifying. Those girls who had not completed their year's service when the School was introduced will, if still representing the line, be eligible to take the course next year.

It is impossible to say yet how much holding power the certificate is going to wield and how much personnel turnover is going to be cut down. But there is certainly hope on that side of the ledger. The girls, themselves, were voluble in their gratitude for the opportunity given them.

A check-up is being made to determine if the certificates have a permanent place on the counter and what comment they are attracting from customers who should certainly put more confidence in these girls who have received training in cosmetic fundamentals from an outside authority than in just any chance sales girl. We have no figures yet on how much sales have been increased as a result of this impetus—or, as we said in the beginning, injection. It is too soon yet to determine any percentages in that direction. That it did have the morale value expected has been strongly indicated.

In addition to the indirect values to be reaped from this investment, the customer will be directly informed of the qualifications of these cosmetic school graduates not only through the certificate displayed on the counter but by a note appearing in newspaper advertisements run by the stores. These notes will

POWCO BRAND
REG. U.S. PAT. OFF.

NEUTRAL SOAP

Our modern production methods and close selling margin make it possible for you to buy standardized, air floated POWCO BRAND Neutral Soap of *better quality—at a saving.*

POWCO BRAND soap is *laboratory controlled* to maintain rigid uniformity of physical and chemical properties so that, once you adopt POWCO BRAND soap, your base does not vary. That's why chemists like it.

We urge you to consider carefully POWCO BRAND—for better quality at a saving.

POWDERED NEUTRAL SOAP

JOHN POWELL & CO.
One Park Avenue
New York 16, N. Y.

appear from time to time thus keeping the girl's pride "on top" so there will be no let-down after a lapse of time.

Supplementary sections have been prepared by Lentheric, tying in specific information on Lentheric products with the basic information given in the course. These sections are to be inserted in their proper places in the original course, so that the girls have a complete reference book. This is not only a practical idea but gives another follow-through to extend the influence of the School for a longer period.

Other methods of capitalizing on the plan may occur from time to time; but, at any rate, no stone will be left unturned in getting the maximum from this plan to promote the prestige and sales of the Lentheric line at the most critical point along the whole selling line.

Chemotherapy of Thyroid Disease

(Continued from page 202)

rapid in the severer cases.[27] The size and character of the thyroid gland itself appear to be important considerations and some of the longest delays are noted in cases with large nodular goiters. Long-standing goiters which have recently become toxic also show slow response. Noteworthy is the fact that metabolic response is more rapid in patients who have not been treated with iodine. "In general," says Barr,[14] "it would seem that the rate of response is chiefly dependent upon the amount of thyroid hormone which is stored in the gland before the beginning of treatment."

Although there has been considerable variation in the dosages recommended, it now appears more or less accepted that the initial dose to be employed is from 0.4 to 0.6 Gm. in divided doses daily; this amount to be reduced progressively as the condition and symptons of the patient improves.[14, 21, 26, 29, 30, 31] Following initial thiouracil treatment there is a variable latent period before the drug begins to show its effects. In the great majority of cases, remission of symptoms is attained in from three to six weeks of treatment. As a rule, the remission may be maintained indefinitely with small doses of the drug. As remarked by Bissell,[21] numerous patients treated medically have stopped therapy after six months to a year and have remained in remission. Others have had to resume therapy for longer periods of time.

In addition to treatment with thiouracil, physicians[32] recognize the importance of maintaining and improving the patient's general health. Supplying an adequate diet, high in protein and carbohydrate, supplemented by the vitamin B complex and vitamim C, is considered important for improving the general condition and avoiding complications. Sedatives may be given, and other requisite drugs are administered when indicated.

Despite the fact that thiouracil is a comparatively new drug, certain indications for its use have begun

to emerge quite clearly, while others require further evaluation. Thus, on the basis of rapidly accumulating data, Reveno[31] is of the view that thiouracil appears to be the drug of choice in inducing and maintaining a state of remission in thyrotoxicosis. Williams and Clute[30] similarly find that the drug is highly effective in producing and maintaining a remission of the disease.

Since thiouracil effectively controls most of the phenomena of thyrotoxicosis in the large majority of cases, Rose and McConnell[33] are of the opinion that its use is justified in the protracted treatment of mild or moderately severe cases and in the preparation of selected patients for thyroidectomy. It may also prove of considerable value for patients regarded as uncertain surgical risks.

Bissell[21] has gone into considerable detail on the possibilities and limitations of thiouracil in medicine. While the drug is very effective, he feels that it offers little advantage over iodine in treating mild, uncomplicated hyperthyroidism. Thiouracil, of course, is definitely indicated in thyrotoxicosis which has not responded to iodine. In severe hyperthyroidism, whether accompanied by a nodular or diffuse hyperplastic goiter, it is this authority's considered opinion that thiouracil offers the best treatment, Providing many advantages, the drug is especially useful if and when surgery is indicated because its use permits better preoperative preparation and a smoother postoperative course.

The drug has proved especially valuable when surgery may be impossible or inadvisable, as, for example, during severe infections or pregnancy. Thiouracil has achieved brilliant results with thyrocardiacs and in cases of thyroid cachexia. Heretofore, such cases were probably the most difficult medical-surgical problems in thyroid disease. In the event of recurrent thyrotoxicosis after subtotal thyroidectomy, a rather frequent occurrence, both the patient and surgeon may be wary of another operation which may also prove unsuccessful. In such instances, thiouracil offers a new and promising form of therapy.[34]

Bissell feels that thiouracil has an important place in treating thyroid disease in children. It is his opinion that if the thyrotoxicosis were controlled medically and without surgery during the period of puberty, the disorder might well remain in remission with the establishment of the more stable period of adulthood. Quite recently, it has been stated[35] that if the patient is treated early enough, thiouracil may be considered a specific in acute thyroiditis, a severe inflammation of the thyroid gland.

The medical world has been intrigued with the thought that the need for surgery in many cases might be avoided through the sustained use of thiouracil. Despite the enthusiasm in some quarters concerning the possibility of such "chemical thyroidectomy," more cautious opinion stresses that there has not been sufficient time to determine whether this is possible over a long range period.[24, 34] However, as

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is manufactured by a special process to eliminate harmful impurities, and is supplied to leading manufacturers all over the world.

Shipped in concentrated form only, it has the hard-to-beat combination of high quality and low cost.

Specifications and details sent on request.

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Woolworth Building New York 7, N. Y.

suggested by McGregor,[38] thiouracil might provide the ideal treatment where a patient is not a good operative risk, as for example, in severe hypertension and in patients with psychotic tendencies.

As attested in many reports[1, 2, 6, 37, 38, 39] thiouracil has proved its worth in cases where surgery has become necessary. Evidence is accumulating that it is definitely superior to and more dependable than iodine in the preoperative preparation of the toxic hyperthyroid patient. Furthermore, the thiouracil-treated patient has a smoother operative course and a milder postoperative reaction. It is believed,[21] that the drug's postoperative use probably safeguards against thyroid "storm," the most serious post-operative complication of thyroidectomy. The tendency to bleeding during operation, due to the increased vascularity of the thyroid gland under thiouracil treatment, can be avoided by discontinuing the drug and substituting iodine for a time before operation.[24, 30, 40]

Although thiouracil appears to be an almost ideal remedy for treating thyrotoxicosis, it unfortunately possesses troublesome and sometimes serious or fatal toxic properties. Unfavorable reactions of a most diverse character have been reported from the use of this drug, including agranulocytosis, drug fever, dermatitis of various kinds, enlargement of the lymph nodes, swelling of the salivary glands, arthritis, edema, vomiting, diarrhea, jaundice, albuminuria, and others.[3, 14, 26, 30, 41] The frequency of such reactions is not entirely evaluated, but has been estimated to range as high as 10 per cent.[25] Agranulocytosis, the most serious and sometimes fatal complication of thiouracil therapy may perhaps occur in 2 per cent of the treated cases.[14]

With the exception of some cases of agranulocytosis, most of these complications may disappear within several days to two to three weeks after discontinuance of the drug, when in many cases it may be resumed cautiously in smaller doses.[1, 42]

It is because of these varied undesired reactions, especially agranulocytosis, that workers stress the importance of careful regulation of dosage and frequent observations of patients receiving thiouracil. The drug should be given with great care to those known to have allergic symptoms or tendencies.[34] Because hyperthyroid states are so frequent and widespread, and because release of the drug will result in a great demand for it,[37] investigators have intensified their efforts to provide safeguards against toxic reactions. Aside from frequent white blood cell counts and related measures, various other suggestions have been made, especially with regard to combatting agranulocytosis. The use of members of the vitamin B complex offers promise as means of preventing and treating this blood disorder; pyredoxine, folic acid and liver extract being suggested by various workers.[26, 43, 44] Recently, Rothendler and Vorhaus,[45] reported that the use of penicillin prevented generalized sepsis in a case of agranulocytic reaction due to thiouracil.

In the meantime, the search has gone forward for

some substance which will be nontoxic or less toxic, but equally as effective as thiouracil. Other thiourea derivatives or modifications are already being studied. Williams,[46] for example, has done some preliminary work with tetramethylthiourea and diethylthiourea. Other workers have turned their attention to thiobarbital. Astwood[47] has obtained promising results in a series of thirty cases, but here too toxic effects were observed, with two deaths, one definitely attributable to thiobarbital. Noting a high percentage of reactions to thiobarbital, Bartels[48] has found that this drug may be useful in patients unable to tolerate thiouracil. Of nine patients in whom toxic reactions to thiouracil developed, seven tolerated thiobarbital and were given complete relief of hyperthyroidism.

Work reported from France suggests that a compound used to prepare sulfathiazole may enter the picture. Resulting from an accidental discovery, laboratory and clinical studies[49] have shown that aminothiazole produced the beneficial effects of thiouracil, but did not influence the size of the goiter or the exoptholmos. In addition to this advantage, studies so far have failed to produce toxic accident, from aminothiazole such as have been noted with thiouracil and thiourea.

Of course, much more investigation and evaluation has to be done before thiouracil and the newer compounds are fully accepted and are made generally available. In the meantime the fact remains that the potentialities of chemotherapy and all that it implies have been extended to the treatment of thyroid disease.

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Employment Thru Cosmetics

(Continued from page 204)

workers are properly classified elsewhere. Many cosmetic companies employing a very considerable number of people delegate their manufacturing. Importers certainly employ wage earners. The number of people actually engaged in production may be a very small part of an industry such as cosmetics. So, at the very beginning, we believe that at least double this figure would more truly represent that part of the cosmetic industry engaged in production, packaging and selling at wholesale in 1942.

But this figure of $772,775,000 at retail is certainly an intriguing number of dollars. Surely they represent far more employment than any projection of census figures gives us. And is even this figure, divided let us say by the average wage of the United States, any indication of the people who are employed in the manufacture, packaging and distribution of cosmetics? Have these dollars turned over once, twice or several times,--on each turn providing weekly pay checks for many thousands of people, each employed by the cosmetic industry as surely as if they worked in Coty's factory?

An industry, such as cosmetics, extends its production of wealth, in two directions: one, toward the materials entering into manufacturing and two, toward the diverse groups that participate in distribution.

Let's look at number one.

A great diversity of chemicals, perfume oils, and other raw materials enter into the manufacture of cosmetics. An equally great variety of packaging materials are used. Machinery and equipment of many kinds are needed.

The essential oil and aromatic chemical industry is small--we list 36 companies, of which 25 are manufacturing. Certainly, and conservatively, well over half of the employees here are employed by the cosmetic industry, in the true sense that their pay checks reach them only because of the prosperity of the cosmetic industry. Of the 385,593 employees of the chemical industry in 1942 what part owe their living to cosmetics? Certainly two thousand. Of the entire raw material field? Certainly several thousand.

In packaging we get a clearer picture. We know that this industry is a large purchaser of bottles, bottle closures and labels, particularly in higher price ranges. We know that such companies as Swindell, Carr-Lowrey, T. C. Wheaton depend very largely on the industry for their pay rolls--that they have in fact very many employees who are, in reality, working for the cosmetic industry. We also know that the paper box industry, large supplies for cosmetics, have several large factories nearly exclusively devoted to production of as essential a part of modern cosmetics as the contents of the package. If we

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Employment Thru Cosmetics

add cans, collapsible tubes, plastics paper, ink, etc., it becomes very evident that in the fabrication of cosmetics for the market here are several thousand more participating in cosmetic prosperity.

Distribution requires even more employees. BEAUTY FASHION estimates that there are 16,000 full time cosmetic salesgirls in retail stores. But this includes little over 3,000 stores. Certainly, estimating part time sales help in another 30,000 stores we may raise the total of retail sales help to over 25,000. Adding executive time, that is part time of department stores buyers, merchandise managers etc. chain store buyers, department managers, drug store owners, nearly 30,000 people in the retail trade are employed in cosmetic distribution.

Cosmetics rate near the top in advertising and promotions. Equalled only by food, they average 12 per cent of advertising in monthly magazines. The majority of the people on this magazine, every single employee of BEAUTY FASHION is working for the cosmetic industry. Employes of magazines, radio and newspapers, of printers, plate makers, paper and ink how many thousand are cosmetics supporting? How many artists, photographers, lithographers, advertising agency personnel? This may well be the largest part of the cosmetic industry.

We can't tell the congressman just how many employables depend upon the health and prosperity of the cosmetic business. But we can say that it would be a relatively safe and conservative figure to put it very near 100,000. And we mean by that, 100,000 people, drawing their pay checks from the cosmetic industry, no matter who their immediate employer may be—people who work or do not work, are paid well or poorly, depending exclusively on the economic status of the cosmetic industry.

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Low sodium chloride dietary intake has been attempted in the treatment of epilepsy, migraine, Ménière's syndrome, hypertension, cardiac insufficiency and certain renal conditions with considerable success. To this impressive record, M. M. Miller (*J.A.M.A.* 129:362, 1945) now adds the possibility of using low salt intake for the alleviation of insomnia and tension states. In a series of twenty patients with these conditions, reduction of salt in the daily diet resulted in pronounced relief or moderate relief from tension and insomnia in all but three cases. Improvement was noted generally in the duration and regularity of sleep, with a concurrent reduction in lability and intensity of emotional responses. This improved sleep and reduction in tension was usually accompanied by lowered blood pressure and pulse rate. Controlled studies on thirteen patients showed that ten of them suffered relapses following the addition of salt to the diet. Conversely, no untoward effects were observed in patients receiving moderately restricted salt diets.

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